VOL. XII, OLD SERIES. PHILADELPHIA, FEBRUARY, 1898. VOL. I, NEW S. 2.

PUBLISHED IN CONJUNCTION WITH
Sajous's Annual and Analytical Cyclopædia of Practical Medicine.
PRICE OF THIS JOURNAL, SEPARATE, $5.00 PER YEAR.

THE Monthly Cyclopædia OF Practical Medicine AND UNIVERSAL MEDICAL JOURNAL.

EDITED BY
CHARLES E. de M. SAJOUS, M.D.,
PHILADELPHIA.

LIBRARY
FEB 20 1898
UNIVERSITY

LEADING ARTICLES: "Treatment and Pathology of Typhoid Fever"; "Treatment of Rheumatism."

THE F. A. DAVIS CO., Publishers.
Office: 1914 and 1916 Cherry Street, Philadelphia, Pa., U. S. A.
BRANCH OFFICES: New York, U. S. A., 117 W. Forty-Second St.; Chicago, Ill., U. S. A., 9 Lakeside Building.

Exchanges and editorial matter to be sent to 2043 Walnut Street, Philadelphia, Pa.
All letters concerning subscriptions, removals, advertisements, etc., to be sent to the Publishers.
This Journal should be carefully preserved for binding as an additional volume of the Cyclopædia at the end of each year.

Registered at the Philadelphia Post-Office as Second-Class Mail Matter.

Important Therapeutic Uses

OF

Fairchild's Essence of Pepsine.

Fairchild's Essence of Pepsine aids the administration and remedial action of drugs and chemicals which disturb the stomach and impair digestion. It is indispensable to the continued successful use of the mercurials, iodides, sodium salicylate, etc. It is helpful also in the toleration of morphia, allays nausea and vomiting.

As an ever ready resource for the habitual dyspeptic, for the large class of persons who, from mental work, care, anxiety, and naturally delicate stomachs, are frequently subject to attacks of dyspepsia, Fairchild's Essence of Pepsine is a rational, innocent, and effective remedy.

Fairchild's Essence of Pepsine, made direct from the fresh stomach of the nursing calf, is of peculiar value in infantile indigestion, as a stomachic, antiseptic and corrective.

For these purposes Fairchild's Essence of Pepsine is found most convenient and reliable—in every way superior to any other so-called "Essence" of Pepsine.

PACKER'S TAR SOAP.

VEGETABLE OILS, PINE-TAR, AND GLYCERINE.

PURE. ANTISEPTIC. EMOLLIENT.

THE STANDARD.— Used and recommended by the **Medical Profession** for a quarter of a century in the treatment of Dermatic Diseases, for cleansing fetid discharges, for making gynecological examinations, etc.

AS A SHAMPOOING AGENT PACKER'S TAR SOAP is undoubtedly the best known. It is extensively used, both as a delightful cleanser to preserve healthful conditions of the hair and scalp, and in treatment of dandruff and baldness.

THE PACKER MANUFACTURING CO., 81 Fulton Street, New York.

FORMULA—

Each fluid drachm contains:
1-8 gr. Proto-chlor. Iron,
1-128 gr. Bi-chlor. Mercury,
1-280 gr. Chlor. Arsenic,
Calisaya Alkaloidal Cordial.

Adjuvant to Iodides.

12 OUNCE BOTTLE, $1.00.

HENRY'S THREE CHLORIDES

LIQ. FERRISENIC HENRY'S

THE GLANDULAR STIMULANT AND CHALYBEATE TONIC.

THERAPY—

Tonic, Stomachic, Antiscorbutic, Hæmatinic, and Alterative.

Indicated in Anæmias, Chlorosis, and as a reconstructive in convalescence from any cause.

Makes QUANTITY and QUALITY of Blood.

DOSE—1 or 2 drachms.

FORMULA—

Colchicine, 1-20 grain,
Decandrin, 1-10 grain,
Solanin, 1-3 grain,
Sodium Salicylate, 10 grains,
Iodic Acid (equal to 7-32 grain of Iodine) in two fluid drachms of Aromatic Cordial.

8 OUNCE BOTTLE, $1.00.

HENRY'S TRI-IODIDES.

LIQ. SALI-IODIDE HENRY'S

ALTERATIVE, { ANTI-RHEUMATIC. ANTI-SYPHILITIC.

THERAPY—

In Lymphatic and Visceral Disturbances, a Uric Acid Solvent and a Reliable Eliminant in all Diathetic Diseases.

One or two fluid drachms in water exercises a synergistic effect over the entire range of The Salicylates and Iodides.

The chemic union of Maizenic Acid —*from Green Corn Silk*—with Lithium, resulting in MAIZENATE LITHIUM.

2 grains to drachm.

DOSE—1 or 2 drachms.

8 OUNCE BOTTLE, $1.00.

MAIZO-LITHIUM

A POSITIVE DIURETIC.

STIMULATING, YET NON-IRRITATING.

In Genito-Urinary Diseases, Cystitis, Incipient Diabetes, Lithæmia, Urethritis, and all Inflamed Conditions Requiring a Non-irritating Diuretic.

LITERATURE ON APPLICATION. HENRY PHARMACAL COMPANY, LOUISVILLE, KY.

Schieffelin & Co.'s

(NEW YORK)

Soluble Pills and Granules.

Reliable. Soluble. Beautiful.

The Perfection of Pill Making.

Examine Them and Notice

Their Perfect Uniformity in size and weight.
The Crystal Transparency of the coating.
They are the only pills which show the precise colors of the masses.

Test Them and Prove

Their Ready Solubility.
Their Exact Conformity to their several Formulas.
The Certainty of Proper Therapeutic Effects.

Our list of Pills and Granules embraces those made according to the formulas of the U. S. Pharmacopœia; also most of those in common use among the profession.
We also manufacture pills to order.

SPECIFY **Schieffelin's** WHEN PRESCRIBING.

We desire to call the attention of Physicians to our

COCAINE CRYSTALS AND GRANULAR,

which we are now and have been manufacturing in **our own Laboratory** for over twelve years.

Schieffelin's Cocaine is Unsurpassed in Purity.

It is an absolutely pure salt, free from Cinnamyl Cocaine, Ecgonin, Benzoyl Ecgonin, Truxillin, Hygrin, or any of the associate bases found in coca leaves, and as to appearance, melting point, permanganate, or other tests, it is unequalled. If you desire to obtain the full and desired therapeutic effect,

Specify Schieffelin's Cocaine,

and see that this make is dispensed on your orders and prescriptions.

Schieffelin & Co., New York.

LISTERINE. THE STANDARD ANTISEPTIC.

LISTERINE is to make and maintain surgical cleanliness in the antiseptic and prophylactic treatment and care of all parts of the human body.

LISTERINE is of accurately determined and uniform antiseptic power, and of positive originality.

LISTERINE is kept in stock by all worthy pharmacists everywhere.

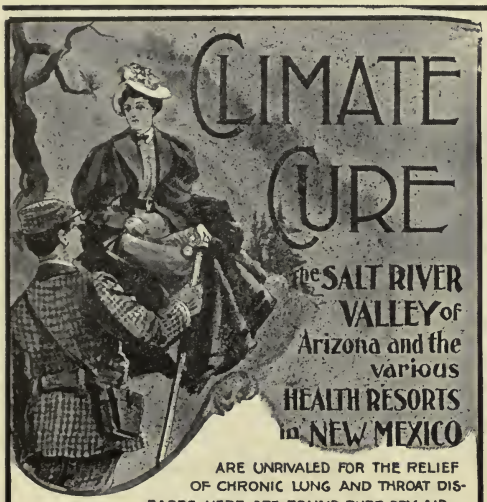
LISTERINE is taken as the standard of antiseptic preparations: The imitators all say, "It is something like LISTERINE."

LAMBERT'S LITHIATED HYDRANGEA.

A valuable Renal Alterative and Anti-Lithic agent of marked service in the treatment of Cystitis, Gout, Rheumatism, and diseases of the Uric Diathesis generally.

DESCRIPTIVE LITERATURE UPON APPLICATION.

LAMBERT PHARMACAL COMPANY. ST. LOUIS.



ARE UNRIVALED FOR THE RELIEF OF CHRONIC LUNG AND THROAT DISEASES. HERE ARE FOUND PURE DRY AIR, EQUABLE TEMPERATURE AND CONSTANT SUNSHINE. THE ITEMS OF ALTITUDE, TEMPERATURE, HUMIDITY, HOT SPRINGS SANATORIUMS, COST OF LIVING, MEDICAL ATTENDANCE, SOCIAL ADVANTAGES, ETC., ARE CONCISELY TREATED IN DESCRIPTIVE PAMPHLETS ISSUED BY THE SANTA FE ROUTE. PHYSICIANS ARE RESPECTFULLY ASKED TO PLACE THIS LITERATURE IN THE HANDS OF INVALIDS.

ADDRESS W. J. BLACK,
G.P.A., A.T.&S.F. RY.,
TOPEKA, KANSAS.

OR C. A. HIGGINS,
A.G.P.A., CHICAGO.

SVAPNIA

OR

PURIFIED OPIUM

FOR PHYSICIANS USE ONLY.

Contains the Anodyne and Soporific Alkaloids, Codeia, Narceia and Morphia.

Excludes the Poisonous and Convulsive Alkaloids, Thebaine, Narcotine and Papaverine.

SVAPNIA has been in steadily increasing use for over twenty years, and whenever used has given great satisfaction.

To PHYSICIANS OF REPUTE, not already acquainted with its merits, samples will be mailed on application.

SVAPNIA is made to conform to a uniform standard of Opium of Ten per cent. Morphia strength.

JOHN FARR, Manufacturing Chemist, New York.

C. N. CRITTENTON, Gen'l Agent, 115 Fulton St., N. Y.

To whom all orders for samples must be addressed.

SVAPNIA IS FOR SALE BY DRUGGISTS GENERALLY.

Have you read the Ringing Editorial on Antitoxin in the Philadelphia Polyclinic for December 11?

The writer (Dr. S. Solis Cohen) urges justly that "it is of the highest importance to have a trustworthy serum, of as high potency as possible, so that a dose small in bulk shall be large in antitoxic units. In every case, the higher the number of antitoxic units per cubic centimeter, the easier it is to give an efficient dose."

750 Units per Cc.

is the potency of the ANTI-DIPHTHERITIC SERUM, SPECIAL, produced by us in quantities equal to every demand. It represents the

Most Concentrated Antitoxin

ever produced on a commercial scale. We have not advanced our prices.

Parke, Davis & Company.

Pneumonia Following La Grippe.

BY M. E. CHARTIER,

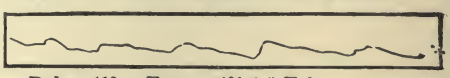
Docteur en Medecine de la Faculte de Medecine de Paris, Membre Correspondant etranger de la Grande Encyclopedie, Section de Philologie.

As a rule certain diseases prove more fatal, not only in given districts, but during certain periods of time, along particular areas of territory. We have La Grippe, decreasing in intensity for the present; it has been replaced by pneumonia, which is not only raging in the United States, but in European countries. The bacteriologists will have to explain this fact; the truth remains however, that the mortality from pneumonia in its various forms is now far in excess of any previous record.

Twenty years ago, and preceding the re-appearance of La Grippe in its epidemic form, pneumonia proved as dangerous as it does at the present time. Many cases fell under my personal observation, and I must admit that my Parisian confreres were at a loss, not for a remedy for the disease alone, but even for a logical line of treatment. Dujardin-Beaumetz became so skeptical that he prescribed stimulants, regardless of therapeutical conditions. The mortality in his ward at the Hotel Dieu proved that his patients fared no worse than the others submitted to the antiphlogistic remedies then en vogue.

At that time, I advocated in my treatise on therapy, the administration of sulphate of codeine in two to five centigrammes doses—one-fourth to one-half grain. Codeine is the only remedy known to me possessing a marked and distinct effect upon the hypersecretions of the bronchial mucous membrane. What I then wished was an analgesic possessing antipyretic properties, which I could safely use. This I have since found in antikamnia and I believe it can be exhibited safely, especially on account of its not having a depressing effect on the cardiac system.

Experimental doses of from one-half to one gramme—seven to fifteen grains—of antikamnia administered under ordinary conditions did not develop any untoward after-effect. The following trace, taken with the sphygmograph was made ten minutes after the administration of one gramme—fifteen grains—of antikamnia.



Pulse, 112. Temp., 101 1-5 Fahr.

The above trace shows plainly that unlike other coal-tar products, antikamnia has a stimulating effect upon the circulation. In this particular case the temperature was sensibly reduced—102° to 101 1-5°. The analgesic effect of the drug was satisfactory.

My conclusion is that in the treatment of pneumonia, antikamnia is indicated as a necessary adjunct to codeine, on account of its analgesic and antipyretic properties and particularly because it acts as a tonic upon the nerve centres. The tablets of antikamnia and codeine containing four and three-quarter grains antikamnia and one-fourth grain sulphate of codeine, to my mind, present these two remedies in the most desirable form. I also find one tablet every hour, allowed to dissolve slowly in the mouth, almost a specific for the irritating cough so often met with in these complications. For general internal medication, it is always best to crush the tablets before administration.

SYRUPUS ROBORANS.

Syr. Hypophos. Comp. with Quin., Mangan., and Strych. 1-128 gr. Strychnine to teaspoonful.

Syrupus Roborans as a Tonic during Convalescence has no equal.

As a nerve stimulant and restorative in wasting and debilitating diseases, as a constructive agent in Insomnia, Pneumonia, Tuberculosis, Bronchial Asthma, Marasmus, Strumous Diseases, and General Debility, this compound has no superior.

SYRUPUS ROBORANS is in perfect solution and will keep in any climate.

DR. T. H. STUCKY writes: In a case of Tertiary Syphilis, very anæmic, the Iodides were revolting to the stomach, being vomited when taken Syrupus Roborans given three weeks with improvement, when the Iodide of Potassium was retained with good results.

DR. W. O. ROBERTS says: In cases convalescing from "La Grippe" **Syrupus Roborans** has no equal.

For Sale by all Wholesale Druggists.

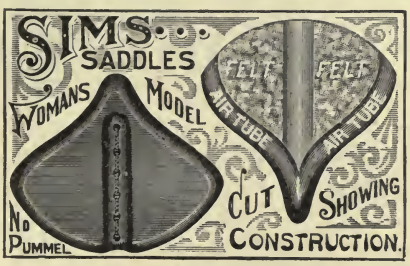
PEPTIC ESSENCE.

A Powerful Digestive Fluid in Palatable Form.

Please note that Essence and Elixir Pepsin contain only Pepsin, while in Peter's Peptic Essence we have all the digestive ferments. These are preserved in solution with **C. P. Glycerin** in a manner retaining their full therapeutic value, which is exerted in and beyond the stomach

It is a Stomachic Tonic, and relieves Indigestion, Flatulency, and has the remarkable property of arresting Vomiting during pregnancy. It is a remedy of great value in Gastralgia, Enteralgia, Cholera Infantum, and Intestinal derangements, especially those of an Inflammatory character. For nursing mothers and teething children it has no superior. Samples sent upon application. Express charges at your expense.

ARTHUR PETER & CO., Louisville, Ky.



"SOFT WHERE IT OUGHT TO BE."

Note the construction. Your weight rests on felt pads. The nose and edge are pneumatic. You get a firm seat, yet the entire front edge is always soft and yielding.

No Hard Pommel to Injure.

Physicians write for special offer to the profession. Catalogues and testimonials.

SIMS SADDLE CO., Canton, N. Y.

In writing to advertisers mention this Journal

Glyco-Thymoline

(KRESS).

An alkaline, antiseptic, non-irritating, cleansing solution for the treatment of diseased mucous membrane, particularly **Nasal Catarrh.**

Bermingham Nasal Douche.

This ideal little instrument for the application of Glyco-Thymoline (Kress) to the nasal passages needs little description.

No pressure possible in its use; hence danger of products of inflammation being forced into the Eustachian tubes is avoided.

SPECIAL OFFER. A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges.

K. & O. Douche to Physicians, 15 cents. $1.50 per dozen. Retail, 25 cents. Remit Stamps.

KRESS & OWEN COMPANY, Mfg. Chemists,
221 Fulton Street, NEW YORK.

Any physician

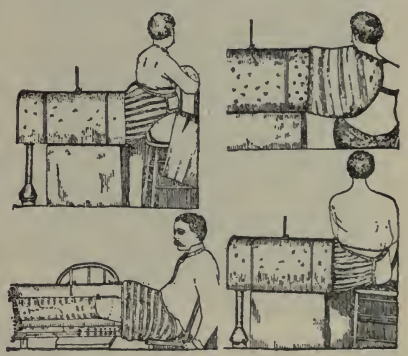
can return the apparatus to us in good condition in thirty days if not satisfactory, and money will be refunded.

The **Betz (Dry Hot air) Arm and Leg Bath** with all attachments for treating arms, legs, shoulders, hips, kidneys, and abdomen is the BEST AND MOST PRACTICAL APPARATUS for the topical treatment of acute, subacute, articular, and gonorrhœal rheumatism; arthritis, ankylosis, synovitis, etc., due to trauma, gout, etc.; in other words, to cause absorption of effusion and restore mobility to joints, stiffened by injury or disease.

IT RELIEVES PAIN IMMEDIATELY.

Out of over 200 INQUIRIES NOT ONE would return the bath for what he paid for it. (With our apparatus the required temperature of from 200° F. to 400° F. can be borne with comfort for longer than an hour, given twice daily.)

Send for Literature on the Subject.



Dr. Gustavus Blech, of Detroit, previous to publishing his clinical report on October 9th, in the *Journal of the American Medical Association*, wrote us: "I am simply astonished and satisfied that your apparatus will make the Esmarch and plaster-of-Paris bandages—our present means of treating articular troubles—surgical relics." **Price of bath, including attachment, $12.00 and $20.00.**

IT IS ALSO A STERILIZER.

The addition of a tray and front door makes our apparatus the simplest and best dry heat sterilizer. The greatest surgeons agree that instruments stand dry heat better than steam. All surgical dressings, gauze, cotton bandages, etc., can be rendered dry and aseptic in twenty minutes at 300° F. **Price $3.00 and $5.00 extra.**

FRANK S. BETZ & CO., 78 State St., Chicago, Ill.

WE MAKE ALL KINDS OF BATHS. OVER 27,000 SOLD TO PHYSICIANS. SEND FOR REPORTS AND CATALOGUE.

In writing to advertisers mention this Journal

ZE=AN (N., B. & CO.)

A Concentrated Fluid Extract of Corn Silk.

Ze-an (N., B. & Co.) is the most active diuretic of the materia medica, a solvent of uric acid and phosphatic gravel and an anodyne to the genito-urinary mucous membrane.

Ze-an (N. B. & Co.) is *par excellence* the remedy for

NEPHRITIS
CYSTITIS
URETHRITIS
and for **URIC ACID** and
PHOSPHATIC GRAVEL.

Useful also for the removal of dropsical effusions.

UTEROTONIC

(N., B. & Co.)

A combination in palatable form of Squaw Vine, Black Haw, Jamaica Dogwood, Golden Seal, Black Cohosh, Cascara Sagrada, Hyoscyamus and Potassium Bromide.

UTEROTONIC (N., B. & Co.) is the most successful remedy yet offered for atonicity and irritability of the uterus and ovaries,

Dysmenorrhœa,
Menorrhagia,
Ovarian Neuralgia,
Endometritis,
and as a preparation for **Parturition,**

Increasing the force and lessening the pain of the uterine contractions.

Full Descriptive Pamphlets and Samples of the above furnished on application to

NELSON, BAKER & CO.,

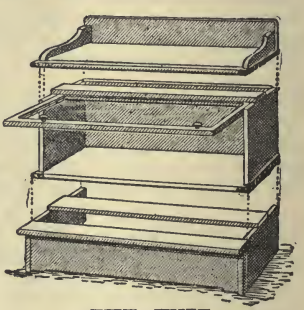
Manufacturing Pharmacists, - DETROIT, MICH.

WERNICKE SYSTEM ELASTIC BOOKCASES.

A System of Units that Grows with the Library.

The doors, when open, slide backward, over the books into the case, and are out of the way.–Always complete, yet never finished.–Wernicke pays the Freight.–Satisfaction guaranteed.–Agencies in all leading cities;

THE WERNICKE CO.,
GRAND RAPIDS, MICH.



THE UNIT.

SEND for the interesting and beautiful book entitled **FACTS AND SUGGESTIONS REGARDING THE PINELLAS PENINSULA, FLORIDA.** It is Illustrated with 75 Beautiful Half-tone Engravings, nearly all of them from Photographs. Handsomely Printed on Fine Enameled Paper. Crown Octavo. 132 Pages. Price, 25 cents, postage prepaid. THE F. A. DAVIS CO., Publishers, 1914-16 Cherry St., Phila., Pa.

Guaiacol Carbonate

(Duotal.)

Creosote Carbonate

(Creosotal.)

These two Carbonates are now acknowledged to be the most pleasant, safe and effective remedies in the treatment of tuberculosis. An experience of over five years has established the fact that Creosote Carbonate and Guaiacol Carbonate are free from the noxious by-effects of the plain creosote and guaiacol, and exhibit only the therapeutic properties of these drugs. The neutral Carbonates cause neither irritation nor inflammation of the stomach or intestines, and abnormal fermentation and decomposition processes are stopped. No other guaiacol compound contains so high a percentage of chemically pure crystalline guaiacol as Duotal, namely: over 90%; while Creosotal contains 92% of pure creosote. The Carbonates are the only two intestinal antiseptics whose action extend as far as the ileum; but, as has been shown by thorough investigation, they cannot be found at the commencement of the large intestine when administered in ordinary doses.

Professor Dujardin-Beaumetz, in the Supplement to the Dictionary of Therapeutics, Paris, 1895, states:

"From numerous observations, published both in France and abroad, it "appears that Carbonate of Guaiacol stimulates the appetite, facilitates "assimilation, invariably produces a considerable increase in weight, and "imparts to the system great resisting power. Its antiseptic action will "arrest the development of any microbes in the intestine and obviate the "generation of gases, which is always unpleasant. Fits of coughing will "decrease, the expectoration will be modified, fever as well as perspiration "at night will gradually disappear, and the patient will thus enjoy refreshing sleep."

Dr. Nied, Physician-in-Chief at St. Elizabeth's Hospital in Vienna, has treated last winter a number of female patients who were suffering from acute bronchitis, complicated in some cases by influenza, with Guaiacol Carbonate in doses of from 7½ grains to 22½ grains, twice daily, with excellent results. (*Allgemeine Wiener Medicinische Zeitung*, June, 1897).

Dr. Eschle in Professor Baumann's physiologico-chemical laboratory in the Medical Department of the University of Freiburg, found that Guaiacol Carbonate is the more thoroughly used up the smaller and more frequent the doses in which it is given. In phthisis, therefore, Eschle recommends the administration of a dose of 4½ to 7½ grains of Guaiacol Carbonate four times daily. (*Zeitschrift für Klinische Medizin*, Volume 29, 3 and 4).

Dr. Jacob, Chief at the University Medical Clinic of Professor Leyden in Berlin, has obtained very satisfactory effects from the use of Creosotal in a number of cases of pronounced phthisis, though comparatively small doses have been employed. Each patient began with 5 drops three times daily, increasing the dose three drops every day, until 25 drops were taken at a dose. At this they were kept for from one to four weeks, when the dose was diminished in a similar ratio, until only 10 drops were taken thrice daily; and then the ascending scale was begun again. (Inaugural Dissertation by Hans Nordt, University of Berlin, February, 1897.)

VON HEYDEN'S

ANTISEPTIC CREDÉ (Citrate of Silver, Heyden)
CREDÉ'S LACTATE OF SILVER
APOLYSIN
GUAIACOL CHEMICALLY PURE CRYSTALS
GUAIACOL PURE, LIQUID
GUAIACOL-SALOL
OLEO-CREOSOTE
OLEO-GUAIACOL
ORPHOL (Betanaphtol-Bismuth)
PHENOL-BISMUTH
XEROFORM (Tribromphenol-Bismuth)
ORTHO-CHLORPHENOL
PARA-CHLORPHENOL
PARA-CHLORSALOL

SCHERING & GLATZ, 55 Maiden Lane, New York,
Literature furnished on application. **Sole Agents for the United States and Canada.**

No. One Madison Av. New York

Dear Doctor:

If you prescribe cod liver oil, you want the best preparation = i.e Maltzyme with C.L.O. It has twice as much Diastase as any other malt with oil, and it is palatable. It possesses all the virtues of cod liver oil combined with those of the diastasic nutrient = the "Digestive food" = Maltzyme.

Faithfully yours.
Malt-Diastase Co.
C.C. S.

SEABOARD AIR LINE
S.A.L.
VESTIBULED LIMITED TRAINS.
DOUBLE DAILY SERVICE

Health
...AMONG THE...
Pines.

AT SOUTHERN PINES, N. C. Situated in the heart of the renowned long-leaf-pine belt and at its highest elevation: six hundred feet above sea-level, Southern Pines possesses all the advantages of resorts farther south, while being free from the many well-known disadvantages often encountered there. Its superior location in the midst of the noble pines, whose health-giving and delicious odor is constantly inhaled, and the remarkable purity of the water here obtained, together with extremely mild climate, renders this the most desirable resort for persons suffering from lung, throat, and malarial troubles.

The new magnificent Piney Woods Inn and six smaller hotels offer unusually excellent accommodations at reasonable rates.

DOUBLE DAILY SERVICE IN PULLMAN, VESTIBULED, LIMITED TRAINS

VIA THE

SEABOARD AIR LINE.

For Illustrated Pamphlet, "Ozone, Pines, and Health," giving full information in regard to Rates, Schedules. etc., call on nearest S. A. L. Ticket Agent, or address T. J. Anderson, General Passenger Agent, Portsmouth, Va,

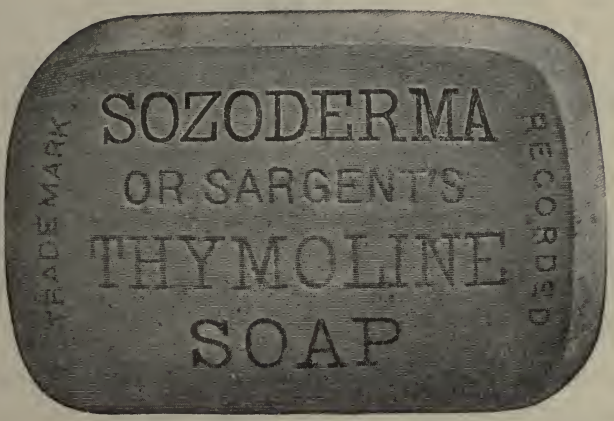
In writing to advertisers mention this Journal

SAFETY IN SOAP

By Using This Agreeable Disinfectant

A small Sample Cake Free

See below.



THIS invaluable soap—shown here full size (4 oz. cake)—has become the favorite antiseptic soap with the leading Physicians and Surgeons of America. and is also popular for general use, being both remedial and pleasant to use.

All reputable dealers sell it—price, **25c.** The Proprietors, Messrs. Hall & Ruckel, Wholesale Druggists, New York, will send a small sample cake Free if you mention this publication.

FOR GOOD RESULTS

IN COUGHS, COLDS, AND BRONCHITIS

Put Your Patients on **LEINOL** *Emul Ol Lini Co.*

Modified formula of Prof. Wm. H. Thomson, University of New York.

The best combination ever given to the profession, especially indicated in childhood and old age, pleasant to the taste, increases the appetite, dispels night-sweats. The cough ceases and there is a gain of weight and renewed energy following its use.

Each fluidounce contains: Ol Lini Co., 33⅓ per cent.; Acidi Hydrocyani, 4 gtt.; Sulph. Codeine, ½ gr.; Ol Cinnamon; Irish Moss, q. s.

Original lecture of "Significance of Cough," by Prof. Wm. H. Thomson, free.

A full pint bottle will be sent free to any physician who desires to test it, if he will pay the express charges.

THE NORWICH PHARMACAL COMPANY,

NORWICH, NEW YORK.

In writing to advertisers mention this Journal

Maltine

MALTINE is not merely "malt," nor is it a mere "extract of malt," nor an "essence of malt."

MALTINE is the most highly concentrated extraction of all the nutritive and digestive properties of Wheat, Oats, and Malted Barley.

It has stood alone and unrivalled throughout the world in the therapeutic field for more than twenty years, despite the most strenuous efforts of the ablest pharmaceutical manufacturers to produce a preparation approaching it in medicinal value, elegance, palatability, and stability.

"Malt" is not "MALTINE."

"Extract of Malt" is not "MALTINE."

"Essence of Malt" is not "MALTINE."

"MALTINE" must be designated to get "MALTINE."

DOCTOR Do You Cure Your Goitre Patients?

I cure all of mine and receive from $25 to $50 from each of them. The cost of treating a case will not exceed $1.00 Enclose a 2-cent stamp for particulars.

Lock Box 604. F. E. MAY, M. D., Bloomington, Ill.

SEND FOR OUR NEW 28-PAGE DESCRIPTIVE CATALOGUE. MAILED TO ANY ADDRESS PROMPTLY ON REQUEST.

THE F. A. DAVIS CO., 1914-16 CHERRY ST., PHILADELPHIA, PA.

PLANTEN'S CAPSULES AND PERLOIDS TRADE MARK OF SANDAL OIL

CAPSULES.

			PER DOZ.
No. 53A	10 Minims Size.	12 in Box	$2.25
" 53		24 "	4.25
" 54		36 "	6.25
" 54C		100 "	15.00

"PERLOIDS,"

OR IMPROVED FRENCH "PERLES."

Cheaper and Better than the Imported.

			PER DOZ.
No. 421A	5 Minims Size.	40 in Vial	$ 4.75
" 421B		80 "	9.00
" 421C		100 "	10.20

A trial bottle or dozen sent prepaid on receipt of price.

H. PLANTEN & SON (Established 1836), New York.

Manufacturers of over 400 varieties of FILLED AND EMPTY CAPSULES.

Uniformly Effective, Agreeable and Lasting,—the Standard Preparation of Erythroxylon Coca

During past 30 years most popularly used Tonic-Stimulant in Hospitals, Public and Religious Institutions everywhere.

VIN MARIANI

"MARIANI WINE"

We have received over 7000 written endorsements from PROMINENT PHYSICIANS in Europe and America.

FORMULA: The concentrated extract—the aromatic principle of the fresh Coca Leaf, blended with a special quality of grape juice of southern France.

DOSE: Wine-glassful three times a day, or more or less at Physician's discretion.

Nourishes - Fortifies - Refreshes

AIDS DIGESTION - STRENGTHENS THE SYSTEM

AGREEABLE TONIC-STIMULANT WITHOUT UNPLEASANT REACTION.

To avoid disappointment please specify "Vin Mariani."

SOLD AT ALL PHARMACIES.

PARIS: 41 Boulevard Haussmann.
LONDON: 239 Oxford Street.
MONTREAL: 28 Hospital Street.

MARIANI & CO., 52 W. 15th St., New York.

Axion Elastic Truss.

Worn with comfort NIGHT and DAY.

The U. S. patents which we have just received for our **Axion Elastic Truss** and the **Axion Pneumatic Pad** enable us to offer to the profession a perfect truss, perfectly made, at a *moderate price.*

The Axion Pneumatic Pad is a perfect air-pad, as comfortable as a water-pad; it holds better and is more durable. It can be filled and emptied by the physician at any time in half a minute. It can be made hard or soft to any degree necessary, thus adapting it to a variety of cases. It is a permanent, durable, comfortable, reliable pad.

Our **Axion Elastic Truss** is the most comfortable truss made. It holds the best and is the easiest to adjust.

ORIGINAL MANUFACTURERS OF THE ELASTIC TRUSS; WE ALWAYS KEEP THE LEAD.
SUPERIOR QUALITY, MODERATE PRICES. SEND FOR ILLUSTRATED CATALOGUE.

G. V. HOUSE MFG. CO., **744 Broadway, New York City.**

Send for our New 28-Page Descriptive Catalogue. Mailed to any address promptly on request. THE F. A. DAVIS COMPANY, Medical Publishers, 1914-16 Cherry Street, Philadelphia, Pa.

The American
THERAPIST

A Monthly Record of Modern Therapeutics.

Original, Practical, Independent, Interesting.

SUBSCRIPTIONS SOLICITED.

$1.00 PER YEAR

Sample Copies, 10 cts.

THE AMERICAN THERAPIST PUBLISHING CO.,
Lock Box 1170, New York.

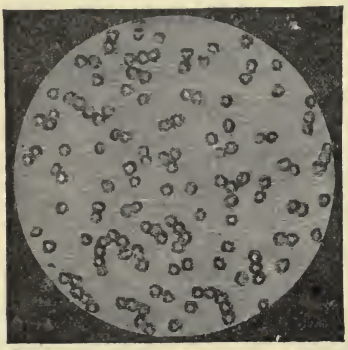
"The greatest therapeutic discovery of the age, and of the ages, is that where we cannot produce good blood we can introduce it."

What is Hæmatherapy?

A New Thing—and a New Name which, though literally translated (Blood Treatment), may not convey to every one a definite idea. It is a treatment which consists in opposing to a condition of disease the very power—good and sufficient Blood—that would naturally prevent it, that would still cure it spontaneously, and that actually does cure it spontaneously, wherever the blood-making work of the system is perfectly efficient; and therefore also *will* cure it, if a deficiency of the vital element be supplied from without, under proper medical treatment.

That Blood is such a power as here described, is an undisputed physiological fact. Its transmission from one animated organism to another, for the purpose of supplying a defect in the latter, is the substance of the Blood Treatment; and How to Do this, in different cases, is the form or description of the same. Blood may be taken from a healthy bullock (arterial blood—elaborated with due scientific skill); or it may be obtained in the well-attested living conserve known as bovinine, from any druggist; and may be introduced into the veins of the patient in either of four ways, that may be most suitable to the case: viz.: by the mouth and stomach; by injection, with one-third salt water, high up in the rectum; by hypodermical injection; or by topical application to any accessible lesion.

A Film of Bovinine: Showing the Blood-corpuscles Intact.



Micro-photographed by Prof. R. R. Andrews, M.D.

THE CURE OF PULMONARY CONSUMPTION

is one of the latest and most wonderful developments of Blood Power—introduced mainly by the mouth, and sometimes also by spraying bovinine into the trachea by an atomizer. Every week of judicious internal blood treatment, with proper medical and hygienic care, has resulted in steady improvement as to all symptoms, with scarcely an instance of check, much less of relapse, until complete apparent cure, and that in the more advanced stages of the disease. As further examples, may be mentioned: Anæmia, Cholera Infantum, Typhoid Fever, Hæmorrhagic Collapse, and many other of the most dangerous and aggravated diseases.

IN SURGERY: A CHRONIC ULCER,

of no matter how long standing or obstinate and aggravated character, can be cured with certainty—at least, the first instance of failure has yet to be heard of—by constant application of bovinine to the wound with proper surgical treatment and sterilization. Such cases are usually cured in from four to six weeks. So of traumatic injuries of all kinds; carbuncles, fistulas, abscesses, and even gangrene.

NUMEROUS CLINICAL REPORTS

of well known Physicians and Hospitals, where the Power of Supplied Blood is constantly relied on as a cardinal factor in the cure of disease and support of surgery, are at the service of every practitioner who desires to keep up with the progress of his profession, and may readily be obtained (including, of course, the technique and subsidiary treatments pursued) by applying to

THE BOVININE COMPANY, 75 West Houston Street, New York.

In writing to advertisers mention this Journal

CHIONIA

THE HEPATIC STIMULANT

INDICATED IN

Diseases Caused by Hepatic Torpor.

Does not purge, per se, but under its use the Liver and Bowels gradually resume their normal functions.

DOSE—ONE TO TWO FLUID DRACHMS, THREE TIMES A DAY.

PEACOCK'S BROMIDES

THE STANDARD SEDATIVE

INDICATED IN

Congestive, Convulsive and Reflex Neuroses.

Absolutely uniform in purity and therapeutic power, produces clinical results which can not be obtained from the use of commercial bromide substitutes.

DOSE—ONE TO TWO FLUID DRACHMS IN WATER, THREE TIMES PER DAY.

PEACOCK CHEMICAL COMPANY, St. Louis, Mo.

—AND—

36 BASINGHALL ST., LONDON, ENGLAND.

SENG

FOR

INDIGESTION, MALNUTRITION, PHTHISIS,

AND ALL WASTING DISEASES.

DOSE—One or more teaspoonfuls three times a day. For babies, ten to fifteen drops during each feeding.

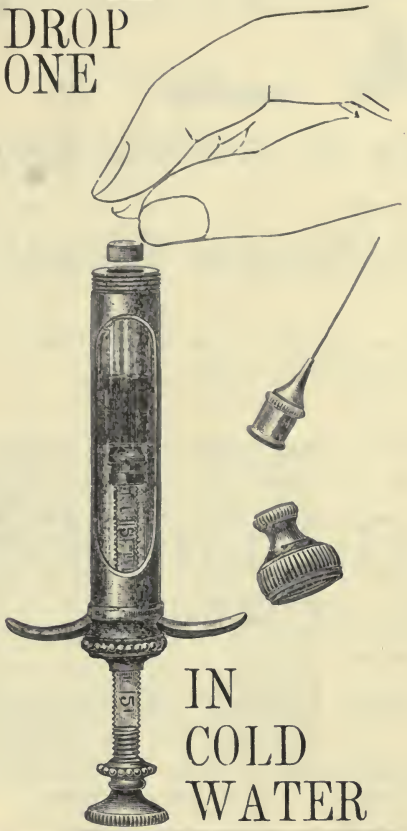
CACTINA PILLETS

FOR **ABNORMAL HEART ACTION.**

DOSE—One Pillet every hour, or less often as indicated.

SULTAN DRUG CO., St. Louis and London.

In writing to advertisers mention this Journal



DROP ONE of our

Soluble Hypodermic Tablets

in the barrel of your syringe, add a few minims of cold or warm water, and the tablet dissolves almost instantly.

Our hypodermics dissolve more quickly

IN COLD WATER

than some tablets do in warm water.

Test them critically and be convinced.

Sharp & Dohme

Chicago *Baltimore* *New York*

Always mention THE MONTHLY CYCLOPÆDIA OF PRACTICAL MEDICINE AND UNIVERSAL MEDICAL JOURNAL when corresponding with advertisers.

Ammonol

In Malarial Fevers

behaves as a stimulant as well as an **Antipyretic and Analgesic** thus differing from other Coal-tar products. It has been used in the relief of rheumatism and neuralgic pains, and in the treatment of the sequelæ of alcoholic excess. AMMONOL is also prepared in the form of salicylate, bromide, and lithiate. The presence of Ammonia, in a more or less free state, gives it additional properties as an expectorant, diuretic, and corrective of hyperacidity.—*London Lancet.*

THE AMMONOL CHEMICAL CO. NEW YORK U.S.A.

The Stimulant

Ammonol is one of the derivatives of Coal-tar, and differs from the numerous similar products in that it contains Ammonia in active form. As a result of this, AMMONOL possesses marked stimulating and expectorant properties. The well-known cardiac depression induced by other Antipyretics has frequently prohibited their use in otherwise suitable cases. The introduction of a similar drug, possessed of stimulating properties, is an event of much importance. AMMONOL possesses marked anti-neuralgic properties, and it is claimed to be especially useful in cases of dysmenorrhœa.—*The Medical Magazine, London.*

Ammonol may be obtained from all Leading Druggists

The Ammonol Chemical Co

Manufacturing Chemists, **New York City.**

Send for Ammonol Excerpta a 48 page pamphlet.

In writing to advertisers mention this Journal

"WELL PREPARED!! NUTRITIOUS!! EASILY DIGESTED!!"

HIGHEST AWARDS WHEREVER EXHIBITED

THE WORLD'S COLUMBIAN COMMISSION.

IMPERIAL GRANUM

THIS STANDARD PREPARED

FOOD

IS EARNESTLY RECOMMENDED as a most reliable FOOD for INFANTS, CHILDREN and Nursing-Mothers;—for INVALIDS and Convalescents;—for Delicate and Aged persons. It is not a stimulant nor a chemical preparation; but a PURE, unsweetened FOOD carefully prepared from the finest growths of wheat, ON WHICH PHYSICIANS CAN DEPEND in FEVERS and in all gastric and enteric diseases. It is easily digested, nourishing and strengthening, assists nature, never interferes with the action of the medicines prescribed, and IS OFTEN THE ONLY FOOD THE STOMACH CAN RETAIN.

SEEMS TO HOLD FIRST PLACE IN THE ESTIMATION OF MEDICAL OBSERVERS.—*"The Feeding of Infants," in the New York Medical Record.*

CONTAINS NO TRACE OF ANY IMPURITY.—*The Lancet, London, Eng.*

A valuable aid in all the graver forms of gastric and enteric diseases.—*The Prescription.*

As a food for patients recovering from shock attending surgical operations IMPERIAL GRANUM stands pre-eminent.—*The International Journal of Surgery, New York.*

Not only palatable, but very easily assimilated.—*The Trained Nurse, New York.*

IMPERIAL GRANUM is acceptable to the palate, and also to the most delicate stomach at all periods of life.—*Annual of the Universal Medical Sciences, Philadelphia, Penna.*

Highly endorsed by the best medical authorities.—*North American Practitioner, Chicago.*

It has acquired a high reputation, and is adapted to children as well as adults—in fact, we have used it sucessfully with children from birth.—*The Post Graduate Journal.*

Especially valuable in fevers, and often the only food the stomach will tolerate in many gastric and enteric diseases.—*Dominion Medical Monthly, Toronto.*

It has stood the test of years, while many competing foods have come and gone, and have been missed by few or none. But it will have satisfactory results in nutrition far into the future because it is based on merit and proven success in the past.—*The Pharmaceutical Record, N. Y.*

IMPERIAL GRANUM is a thoroughly reliable product.—*The Medical Century, Chicago.*

We have used it with the best possible results in several cases of summer diarrhoeas in children. —*The Western Medical Journal, Fort Scott, Kansas.*

It has steadily won its way, step by step until it now stands unchallenged at the head of all food preparations.—*The Medical Council, Philadelphia, Pa.*

Most valuable for patients recovering from acute diseases.—*The Medical Progress.*

★ 'Physician's-samples' sent free, post-paid, to any physician—or as he may direct. ★

JOHN CARLE & SONS, Wholesale Druggists, 153 Water Street, NEW YORK CITY, N. Y.

In writing to advertisers mention this Journal

The only prominent Emulsion of Cod-Liver Oil introduced directly to the medical profession. It is advertised exclusively in medical journals.

HYDROLEINE.

(HYDRATED OIL.)

Produces rapid increase in Flesh and Strength.

FORMULA.—Each Dose contains	
Pure Cod Liver Oil..80 m. (drops)	Soda ..... 1-3 Grains
Distilled Water.....35 "	Salicylic Acid ..1-4 "
Soluble Pancreatin 5 Grains.	

Recommended and Prescribed by EMINENT PHYSICIANS Everywhere. It is pleasant to the Taste and acceptable to the most delicate Stomach

IT IS ECONOMICAL IN USE AND CERTAIN IN RESULTS.

HYDROLEINE (Hydrated Oil) is not a simple alkaline emulsion of oleum morrhuæ, but a hydro-pancreated preparation, containing acids and a small percentage of soda. Pancreatin is the digestive principle of fatty foods, and in the soluble form here used, readily converts the oleaginous material into assimilable matter, a change so necessary to the reparative process in all wasting diseases

Lautenbach's Researches on the functions of the liver would show the beautiful adjustment of therapeutics in preparation of Hydroleine, furnishing, as it does, the acid and soda necessary to prevent self-poisoning by re-absorption of morbid tubercular detritus and purulent matters into the general circulation.

In Wasting Diseases the most prominent symptom is ***emaciation,*** the result of starvation of the fatty tissues of the body as well as the brain and nerves This tendency to emaciation and loss of weight is arrested by the regular use of ***Hydroleine,*** which may be discontinued when the usual average weight has been permanently regained.

The following are some of the diseases in which **HYDROLEINE** is indicated

Phthisis, Tuberculosis, Bronchitis, Catarrh, Cough,

Scrofula, Chlorosis, General Debility, etc.

To Brain Workers of all classes, ***Hydroleine*** is invaluable, supplying as it does, the true brain-food, and being more easily assimilated by the digestive organs than any other emulsion.

The principles upon which this discovery is based have been described in a treatise on "The Digestion and Assimilation of Fats in the Human Body," by H C. BARTLETT, Ph. D, F. C. S, and the experiments which were made, together with cases illustrating the effect of Hydrated Oil in practice, are concisely stated in a treatise on "Consumption and Wasting Diseases," by G. OVEREND DREWRY, M D.

COPIES OF THESE WORKS SENT FREE ON APPLICATION.

Sold by all Druggists at $1.00 per Bottle.

C. N. CRITTENTON,

SOLE AGENT FOR THE UNITED STATES. 115 FULTON STREET, N. Y.

A Sample of Hydroleine will be sent free upon application, to any physician (enclosing business card) in the U. S.

Please mention this Journal

THE

MONTHLY CYCLOPÆDIA

OF

PRACTICAL MEDICINE.

Vol. XII. Old Series. PHILADELPHIA, FEBRUARY, 1898. Vol. 1. No. 2. New Series.

TABLE OF CONTENTS.

	PAGE
ABORTION. Munro Campbell	72
ANGINA PECTORIS	41
Diagnosis. Tecce, J. H. Musser, H. C. Wood	41
Treatment. J. B. Bradbury, W. W. Bostwick, Rumpf, J. H. Musser	42
ARSENIC	43
Physiological Action. Byrom Bramwell, Walker Overend, Comby, Schirlzern, Czerny and Truneck	43
ASTHMA	45
Etiology. J. C. Bowie	45
Treatment. J. C. Bowie, F. I. Knight.	45
BARLOW'S DISEASE	45
Diagnosis. L. S. Hughes, Naegeli	46
Treatment. L. S. Hughes	46
CANCER	46
Treatment. Betton Massey, C. D. Spivak, M. L. L. Levchine, Despeignes	46
CARDIAC DYSPNŒA	72
Etiology. A. Morrison	72
CEREBELLUM, ABSENCE OF ONE-HALF OF	73
Post-mortem. T. H. Neubürger and L. Edinger	73
CHLOROFORM. Leonard Hill, H. C. Wood and W. S. Carter, Hobart A. Hare	47
Deterioration of Chloroform. Newman and Ramsay	48
Pathological Effects. Friedlander, K. Ajello	48
Prevention of Accidents. Arnold	48
Treatment of Collapse. S. T. Reid	49
CHLOROFORM *VERSUS* ETHER (EDITORIAL). Sajous	71
CHOLERA	73
Prophylaxis. E. H. Hankin	73
CRETINISM. Wm. Osler	49
Prophylaxis. A. Gordon Paterson	50
Treatment. J. P. West, H. E. Drake-Brockman, T. Telford Smith, Wm. Osler	49
CYSTITIS	73
Etiology. M. Melchior	73
DIPHTHERIA	50
Pathology. J. J. Thomas, C. M. Hibbard	50
Treatment. Lindsey Porteous, J. W. Washburn, Trumpp	51
DISPLACED AND ADHERENT PREGNANT UTERUS	74
Treatment. K. Franz	74
ERYTHEMA CAUSED BY PRIMULA ACAULIS	74
Etiology. Actandor	74
Symptoms	74
EXTRAPERITONEAL RUPTURE OF BLADDER	74
Treatment. J. F. Mitchell	74
EXTRA-UTERINE PREGNANCY	74
Diagnosis. Mayo Robinson	74
FRACTURE BETWEEN BASE OF CRANIUM AND BONES OF FACE. Slomann	75
FRACTURE	75
Treatment. E. A. Tracy	75
GONORRHŒA	53
Treatment. Christian, Pontoppidan, Orville Horwitz	53
HÆMOPHYSIS. English	75
HEART-WOUNDS. Lewis	76
KYPHOSIS (JUVENILE)	76
Etiology	76
Treatment. Lorenziu	76
LARYNX, CARCINOMA OF	76
Diagnosis	76
Treatment. J. P. Clark and F. B. Harrington	76
NEPHROPTOSIS (MOVABLE KIDNEY)	77
Treatment. Symons Eccles	77
NIGHT-SWEATS OF PHTHISIS	77
Treatment. Wm. Murrell	77
OBESITY	54
Treatment	54
OPERATIVE PERITONITIS	77
Treatment. H. von Erlach	77
PERICARDITIS	54
Diagnosis. Ewart, Wm. Broadbent	54
Treatment. J. B. Roberts, C. B. Porter	56
PERNICIOUS ANÆMIA	56
Diagnosis. Byrom Bramwell, W. B. Ransom, G. von Voss, J. B. Coleman	56
Treatment. Blumenau, Alexander McPhedran	57
PUERPERAL SEPTICÆMIA	77
Treatment. King	77
RHEUMATISM (GENERAL REVIEW)	58
Acute Articular, Bacteriology. Achalme, A. Riva, Triboulet and Coyon, Singer, Jaccoud	58
Chronic Articular Rheumatism. Bäumler	64
Complications. Dickinson, Beach, Steiner, Bannatyne	60
Diagnosis, in Children. Cheadle	59
Etiology, Chronic Rheumatism. Chvostek	59
Treatment. Foster, Jaccoud, H. W. Crouse, Eshner, Cheadle, H. C. Wood, Max Olny, Sokoloff, Editorial in Therapeutic Gazette, Siredey, Lemoine, Vidal	60
Treatment of Chronic Articular Rheumatism. Ott, Schüller	64
RHEUMATOID ARTHRITIS	77
Treatment. G. A. Bannatyne	77
SYPHILIS	78
Treatment (Abortive) Pontoppidan	78
TORTICOLLIS	78
Treatment. J. Collins	78
TOXÆMIA	78
Treatment. W. McKeown	78
TYPHOID FEVER (GENERAL REVIEW)	65
Diagnosis of Perforation. Finney	69
Diarrhœa and Perforation. Wm. Osler, Finney	69
Pathology. Osler	65
Surgical Treatment. Monod and Van Verts, John B. Deaver, Finney	69
Treatment. Osler, F. E. Hare, S. Solis-Cohen, J. T. Wheeler, J. F. Toughy, Duchenne, A. J. Downes, J. Murray-Gibbes, Ketcher, Owen F. Paget, Herbert Bramwell	65
UTERINE DISEASE	78
Etiology. L. D. Bulkley	78
Treatment. E. M. Simons	79
UTERINE FIBROID	78
Treatment. A. H. Goelet	78
WOUNDS	79
Sequelæ. Samuel W. Robinson	79
Treatment. R. Winslow	79
REVIEWS	79
Reference-book of Practical Therapeutics, by Various Authors. Foster	79
NEW BOOKS RECEIVED	80
MONOGRAPHS RECEIVED	80

Cyclopædia of the Year's Literature.

ANGINA PECTORIS.

Diagnosis.—A special variety of musical heart-murmur, resembling a feeble groan or chirping of chickens, is a new sign described by Tecce.[1] Capozzi had already noticed this murmur, and invariably found at the necropsy a perforation of one of the valves. He describes the case of a man, aged 30, suffering from anginal attacks, in whom there was a double aortic murmur, the diastolic part of the murmur being musical. The apex-beat was in the fifth space, outside the nipple-line. There was no history of rheuma-

[1] La Rif. Med., April 2, '97.

tism, but a clear history of syphilis. Death occurred during one of the attacks of angina. At the autopsy the mitral valves were found normal; the aortic valves were thickened, two cusps being adherent; the third was perforated near the aortic parietes, but not adherent. The coronary arteries were healthy.

Rendu, some time ago, emphasized the fact that, while true angina is always associated with cardiac lesions, these do not always give rise to appreciable physical signs, the lesions being only discovered after death. The differential points which he found most reliable are the following:—

True angina pectoris is very rare before the age of forty.

The pain commences always in the heart, while in pseudo-angina it is ascribed to the arm and radiates in several directions.

In true angina the attacks are infrequent, the patient being likely to succumb in the second or third attack.

It is generally induced by effort, emotion, and disorders of digestion.

It occurs in the day-time, while in false angina the attacks are generally nocturnal.

The sufferers are pale and can neither stir nor breathe. In the false angina they are agitated, get up from bed, and run to the window for fresh air.

J. H. Musser[1] infers the presence of dilatation of the heart by the physical signs of displaced apex-beat, gallop-rhythm, a soft, regurgitant murmur in the tricuspid or mitral area, by venous phenomena, and by the congestions, cyanosis, and dropsy that attend this affection. The results of cardiac percussion may be confirmatory, but are not looked upon as essential in the diagnosis of cardiac dilatation. Five cases to illustrate the following propositions:—

1. When dilatation of the heart supervenes in a patient the subject of an attack or attacks of angina pectoris the subjective symptoms may subside. At the same time the physical type of the individual changes.

2. Angina pectoris may occur in a patient who has had dilatation of the heart when the organic condition (dilatation) is removed by treatment.

3. True angina, when it occurs in dilatation of the heart, admits of a prognosis more favorable than when it occurs with other mural conditions, as myocarditis or hypertrophy, without dilatation.

4. Grave cases of dilatation of the heart, conversely to the above, may be looked upon as amenable to successful treatment if the patient should have paroxysms of true angina pectoris.

5. In the treatment of angina pectoris digitalis is of doubtful value, except if there is an excess of dilatation.

6. The pain of angina appears to be due to increased intraventricular pressure, although other causes are, no doubt, operative.

Horatio C. Wood[2] expresses the view that if angina pectoris is due to increased intraventricular pressure, we should expect the arterial system to play the chief rôle and not the heart. The action of nitrate of amyl is interesting in this connection: it relieves the aorta and takes away the resistance of the heart. Digitalis has a curious effect; and its use suggests this theory: if angina pectoris can be stopped by hypodermic injections of the nitrite of amyl, we can, if we give enough aconite, do away with intraventricular pressure altogether. If this is true, digitalis must be death to the heart in angina pectoris.

Treatment.—ERYTHROL-TETRANI-

[1] Amer. Jour. Med. Sciences, Sept., '97.
[2] Med. Record, June 5, '97.

TRATE.—To illustrate the great value of this drug J. B. Bradbury[1] mentions a severe case in a physician, in which erythrol-tetranitrate (1-grain doses) was taken steadily, at eight hours' interval, as a prophylactic. For three weeks there was immunity from attacks, although some weariness and oppression came on after six or seven hours from taking the tablets. Since then he has taken it four times each 24 hours with marked relief.

The initial fall of the pulse-tension depends on the mode of administration. If the drug is given in spirit and water (1 grain in 1 drachm of alcohol and 7 drachms of water) the tension begins to fall in from two to three minutes; if given in a pill and swallowed, the time is from twenty to forty minutes; if taken in tablet form and masticated, the time lies somewhere between the two. The best form of administration is undoubtedly the tablet. The alcoholic solution sometimes irritates the stomach.

HYOSCINE.—In a case in which all the usual remedies had become useless W. W. Bostwick[2] tried hyoscine upon the assumption that angina pectoris was a neurosis of the sympathetic. An injection of $^1/_{75}$ grain of hyoscine hydrobromate was given. In fifteen minutes the patient was relieved; and in half an hour she was sleeping quietly. This dose, although larger than safe, was not followed by any poisonous symptoms. There was slight dizziness, and a perceptible flushing of the face.

DECALCIFICATION.—Accepting the hypothesis that angina is dependent upon calcification of the coronary arteries Rumpf[3] argues that decalcification of these arteries is indicated by increasing the elimination of lime. If a person is put upon a diet poor in lime, an abundant elimination of the same is provoked in him, if he takes, at the same time, a solution composed of the following:—

℞ Sodium carbonate, 150 grains.
Lactic acid, a sufficient quantity to saturate it.

Add

Lactic acid,
Syrup, of each, 2 $^1/_2$ drachms.
Distilled water, 6 ounces.

This amount to be taken during the day.

This also acts as a diuretic and the quantity of lime eliminated is increased from 50 per cent. to 52 per cent. A diet which is poor in lime also indicated.

Daily diet: meat, about eight ounces; bread, fish, potatoes, and apples, each, three ounces. This contains ten times less lime than a corresponding quantity of milk, or four times less than the diets advocated by Hoffmann as substitutes for milk. The potatoes may be replaced by fresh beans, cucumbers, or peas. Cheese, eggs, beets, cabbage, rice, and spinach, all of which are rich in lime, are contraindicated. These measures were employed in twelve cases of angina and atheroma. In three cases of angina pectoris the success was remarkable.

DIGITALIS.—J. H. Musser[4] states that in angina pectoris digitalis is of doubtful value, and it should not be given unless an excess of dilatation be present.

ARSENIC.

Physiological Action.—Byrom Bramwell[5] observed a case of pernicious anæmia in which there developed an herpetic eruption on the forehead during the arsenical treatment. Mr. Jonathan Hutchinson has directed attention

[1] Brit. Med. Jour., April 10, '97.
[2] Med. Record, May 8, '97.
[3] Berliner klin. Woch., March 29, '97.
[4] Amer. Jour. Med. Sciences, Sept., '97.
[5] Lancet, July 24, '97.

to the fact that herpes zoster is in some cases apparently the result of arsenic.

The author calls attention to the great interest of this case, especially when it is remembered that arsenic is a specific in many cases of recurring herpes of the vulva and in pemphigus.

CHOREA.—Walker Overend[1] emphasizes the fact that large doses of arsenic are necessary to produce a beneficial influence in subduing the movements; this is best seen after the movements have existed for some time,—weeks or months,—that is, when a cure seems almost hopeless. The drug should be given after food, and the little patient should lie down for half an hour afterward in order to avoid nausea and vomiting.

French physicians are especially prone to use large (very large) doses. Comby,[2] for instance does not hesitate to administer the drug regardless of physiological symptoms. Out of 12 cases reported as having been thus treated and cured in the short period of from seven to thirteen days, some had nausea or vomiting, 2 had notable gastric embarrassment, 1 had arsenical paralysis (although this disappeared entirely), and 1 had passing pigmentation of the upper extremities.

Schirlzern[3] mentions the case of a 15-year-old child of a distinctly neuropathic tendency, with a history of articular rheumatism, who was suffering from chorea minor, the spasm involving the left sterno-mastoid and splenius capitis. Ascending doses of Fowler's solution were ordered until very large doses were taken. At the end of thirty-two days as much as 2 drachms had been ingested, when the patient developed herpes nasalis, and, a day later, a chill and high fever with herpes labialis, and laryngealis and paræsthesia of one side of the head.

CANCER.—The radical cure of epithelioma by arsenous acid is again brought forward by Czerny and Truneck.[4] Arsenic in powder proving abortive, a solution of arsenous acid in equal parts of rectified spirit and water, of the strength of 1 part of the acid to 150 of the menstruum was employed. The authors emphasize the fact that the first step is to thoroughly cleanse the sore by vigorously rubbing or scraping the raw surface, a moderate quantity of blood being allowed to flow: a procedure which must not be very agreeable to the patient. The surface of the ulcer is then thoroughly moistened with the solution, shaken up before using, and allowed to dry, preferably without dressing of any kind. A scab forms, over which the solution is applied daily. The margins of the scab tend to separate from the subjacent tissues; the treatment is continued until the scab is only retained in place by a few loose adhesions. Those are divided and the scab removed and a fresh application of the arsenical solution is made. If, on the following day, the resulting scab is thin, of a light-yellow color, and easily detachable, it indicates that the tissues no longer comprise any trace of cancerous growth. If, on the other hand, a dark-colored, firm, and closely adherent scab again forms, the whole treatment must be repeated. The thicker the resulting scab, the more energetic should be the treatment—that is to say, the stronger should be the solution, the strength of which may then be increased from 1 in 150 to 1 in 100 or even to 1 in 80. When the desired result has been attained there remains a granulating wound, covered with a delicate, white pellicle, to be dealt with on general principles.

[1] Lancet, July 31, '97.
[2] La Médecine Moderne, Aug. 19, '96.
[3] Schmidt's Jahrbucher, Jan., '97.
[4] La Semaine Médicale, May 10, '97.

ASTHMA.

Etiology.—According to J. C. Bowie,[1] barometric changes play an important rôle in the production of a paroxysm. Then a fall in the barometric pressure takes place, the asthmatic subject develops and passes through a series of symptoms of an identical nature to those which are observed when men are suddenly removed from additional atmospheric pressures to the normal. This force, which differs so vastly in its intensity, establishes a series of symptoms which vary only in their severity and immediate results. Should death take place under these conditions, the post-mortem appearances may be compared with those observed in death from carbonic-acid poisoning, and their further identity will be apparent.

Treatment.—Appropriate treatment should raise the osmotic resistance of the cells that govern the lymph-transudation in the alveoli and capillaries, so that they will withstand the influences exerted upon them by the changes in the barometric pressure and other atmospheric conditions, annul the inflamed state of the bronchial walls, and establish a normal state of the mucous membrane and glands of the bronchi and the epithelium of the alveoli, as far as the pathological changes admit.

Intralaryngeal injections of the following solutions are used, the quantity of the solutions injected and the amount of the agents contained in each injection being in accordance with the patient's age and condition. One drachm will be sufficient for a child from 5 to 10 years of age, 2 drachms from 10 to 15; after this, from 3 to 5 drachms will suffice at each sitting:—

First Solution.—A 5-, 10-, 15-, or 20-per-cent. solution of menthol in olei amygdalæ.

Second Solution.—Two to 5 minims of a 2 $^1/_2$-per-cent. solution of pure crystals of iodine in olei amygdalæ, added to each drachm of the first solution.

Third Solution.—Five minims of a 10-per-cent. solution of olei lupuli in olei amygdalæ added to each drachm of the first.

F. I. Knight[2] reports the case of a physician who changed his residence and practice several times during his life, on account of asthma, and who finally got relief by going back to the place from which he started.

BARLOW'S DISEASE.

This affection, which is not, as a rule, described in text-books, is peculiar to infants, especially at the close of lactation. Barlow ascribed it to improper food and particularly to the absence of fresh milk from the dietary when the mother's milk is no longer supplied to the infant. He considers it as closely related to rachitis, while Heubner associates it with scorbutus.

The symptoms are pain in the limbs, marked anæmia, sweating of the head, elevation of temperature, sensitiveness of the bones, and cachectic appearance. Although the long bones are involved in the pathological process, the joints remain unaffected, and the sharpest pains appear to be located in the diaphyses of the bones. The suffering is accentuated by any attempt at moving. The joints are not swelled as in rheumatism. The gums are spongy, swelled, and show a bluish discoloration; they bleed when the teeth appear. Subperiosteal hæmorrhage is an important feature of these cases. Gastric derangement is frequently present. Œdema of the extremities may characterize advanced cases, although oc-

[1] Edinburgh Medical Journal, May, '97.
[2] Boston Med. and Surg. Jour., March 25, '97.

casionally observed early in the course of the disease. The urine is often bloody; the stools likewise. Hæmorrhagic spots of the surface are often observed. There may also be hæmorrhagic swelling of one or both eyelids.

Diagnosis.—The exquisite tenderness and pain, the œdema, the hard swellings above the joints, the pseudoparalysis, and the wasting and anæmia make up a remarkable train of symptoms in this disease; but still more striking is the wonderful way in which they all vanish when once the proper treatment is commenced. (L. S. Hughes.[1])

Naegeli[2] records a rapidly fatal case of this disease in a child, 11 months old, who had been supplied with insufficient and improper food. It died in three weeks with all the typical symptoms of the malady: blood-extravasation under the periosteum of bones of leg and elsewhere, fracture of femur, and inanition. There was no history of syphilis and nothing to indicate that the malady was rachitic in nature. Barlow's disease is clearly a chronic general affection of young children due to unsatisfactory feeding, accompanied by changes in the blood and bones, and complicated later by a distinct hæmorrhagic tendency.

Treatment.—Marked case treated with boiled milk and a tablespoonful of orange-juice and raw beef-juice. The next day the patient was somewhat better, but the pain was still present. Ordered the milk not to be boiled and a few drops of lime-juice in addition, to be given twice a day. Three days after the diagnosis was made and change of diet begun, the swellings were smaller, and the pain had evidently entirely disappeared. (L. S. Hughes.[1])

CANCER.

Treatment.—Betton Massey[3] has used with success, in eight cases, metallic electrodes with high milliampèrage: 1000 or more. Both electrodes were applied within the cancerous area in a manner presumed to cause diffusion of the metal into and throughout the cancerous tissue by cataphoresis. The metal thus diffused was supposed to be oxychloride of mercury, and it was believed to reach the cancerous or sarcomatous elements which had become disseminated into the surrounding healthy structures. Two cases were cured, two were apparently cured, and two were benefited. In two the treatment failed to permanently arrest the disease.

C. D. Spivak[4] has collected sixty-one cases under the care of fourteen observers, and found that thirty-three cases had been improved under chelidonium majus. (1) He concludes that it undoubtedly has some influence upon cancerous tissue which requires further investigation; (2) that the experimeuts are not numerous enough to warrant definite conclusions; (3) that the drug being very unstable, many of the unfavorable cases may be attributed to the inefficiency of the preparation; and (4) that probably the technique of the administration is not yet perfected.

Injections of cultures of the erysipelas streptococcus were tried in ten cases of cancer by M. L. L. Levchine,[5] which produced: marked reaction, local and general; burning sensation, swelling, nausea, fever; later weakness; and in two cases albuminuria. But they had a manifest influence on the progress of the growth, which were almost all cancer of the breast; the pain ceased. In five cases

[1] Australasian Med. Gaz., Oct. 20, '97.
[2] Correspondenzblatt f. Schweizer Aerzte, Oct. 1, '97.
[3] New York Med. Record, July 10, '97.
[4] Therap. Gaz., No. 4, p. 229, '97.
[5] Bull. Méd., Jan. 3, '97.

the tumor decreased by half and the glandular enlargement disappeared. Culture from the mixture of the streptococcus and the bacillus prodigiosus seemed the most efficacious.

Despeignes[1] describes a case of rapidly-growing cancer of the stomach treated by exposure to Roentgen rays; the patient exposed twice a day, half an hour each time; very marked improvement. The tumor, previously as large as the head of an eight-months' fœtus, diminished in size. Cancer supposed to be a parasitic affection and susceptible to Roentgen rays in the same manner that tubercle has been shown by Lortet.

A case in which exposure to the Roentgen rays produced considerable benefit was also described by Voigt, of Hamburg, in a letter to the author just quoted. A cancer of the left side of the tongue had been exposed daily, between fifteen and thirty minutes, to the influence of the rays, and was rendered practically painless, although previously $^1/_2$-grain injections of morphine had to be frequently resorted to. The growth of the neoplasm, however, had, in no way, been curtailed. Intercurrent pneumonia carried the patient off two months after the treatment was begun.

CHLOROFORM.

Some interesting points have been adduced upon this anæsthetic during the past year. Most evident among these is the increasing evidence tending to show that, practically, the conclusions of the Hyderabad Commission have proven too sweeping. Indeed, the mortality tends more to show that to overlook the state of the circulation or even to grant but an unconscious attention to the condition of the pulse while administering chloroform is to overlook a danger-signal of considerable value in many cases.

Mr. Leonard Hill[2] believes the cause of chloroform collapse is, in all cases, a primary failure of the circulatory mechanism. It is secondarily that respiration fails, on account of the anæmia of the bulbar centres. This is contrary to the conclusions arrived at by the Hyderabad Commission. Examining all the tracings taken by this commission, he has found that in them, although it is not so interpreted by the experimenters, the same typical fall of arterial pressure is recorded actually occurring before the cessation of respiration. Thus their own experimental evidence contradicts the conclusions arrived at by the workers of the commission.

H. C. Wood and W. S. Carter[3] contend that lowered arterial pressure has a comparatively feeble effect upon the respiration, but, when the pressure falls sufficiently, respiratory depression does occur. Even excessive lowering of blood-pressure primarily stimulates the vasomotor centre, the sensibility of the centre being evidently necessary to the automatic regulation of the circulation. In applying these conclusions to the subject of practical anæsthesia, it is evident that the depression of the circulation produced by chloroform has effect upon the respiratory centres only when the pressure has fallen very low, and, while it may be a factor in the production of respiratory failure during chloroformization, the failure must be chiefly due to the direct influence exercised by the drug upon the respiratory centres.

Hobart A. Hare,[4] doubtless, presents the question in its proper light when he says that the truth as to whether chloroform causes death by respiratory failure

---

[1] Lyon Méd., July 27, '97.
[2] Treatment, May 27, '97.
[3] Jour. of Exper. Med., May, '97.
[4] Gaillard's Med. Jour.; Mass. Med. Jour., Nov., '97.

or by cardiac failure lies half between the two antagonistic forces. The initial process, or the cause of death from chloroform, is usually vasomotor depression and depression of all vital functions, that involving blood-pressure being the most important.

Pathological Effects.—V. Friedlander[1] studied the urine of one hundred male patients before and after chloroform narcosis, and considers that the alteration of the kidney is a tissue-lesion which removes the power of inhibiting the loss of serum-albumin, the causes of which lie in the poverty of oxygen in the blood, the destruction of blood-corpuscles by the chloroform, the injury to the tissues by the liberated chlorine, and, lastly, the lowering of blood-pressure. As evidence for the occurrence of a tissue-lesion, the author regards the fact that in forty-four out of fifty-six cases investigated upon this point, after narcosis the urine contained nucleo-albumin.

K. Ajello[2] published the result of a study of 214 cases of chloroform anæsthesia in which the urine was carefully examined. Albuminuria occurred in 80 per cent. of the cases, lasting from two to six days. Sugar and acetone were never found. In 60 per cent. casts were present, mostly hyaline, but also a few epithelial and granular. All degrees of changes were found in the kidneys: from simple hyperæmia and capillary hæmorrhages to extensive coagulation necrosis of the renal epithelium.

Deterioration of Chloroform.—Newman and Ramsay[3] point out that chloroform rapidly deteriorates as an anæsthetic by keeping. When freshly-distilled chloroform is administered, the vapor is easily inhaled and produces but little irritation in the air-passages and little excitement. If carefully given, sickness, fainting, and irregularity of the pulse and respiration seldom occur during its administration. But if chloroform is kept in a bottle containing air, exposed even to feeble light, changes are produced in the drug which render it less suitable as an anæsthetic. The change is due to the formation of carbonyl-chloride and hydrogen chloride, according to the equation

$$CHCl_3+O=HCl+COCl_2$$

These substances render the vapor slightly pungent in odor, and on inhalation it produces irritation in the air-passages. The period of excitement of the patient is more marked and the liability to sickness during and after anæsthesia is greater. The comparative effects of freshly-distilled chloroform and of chloroform supplied in the ordinary way have been shown to be greatly to the advantage of the former. By shaking chloroform with slaked lime and filtering, the irritating products of decomposition are eliminated, the hydrochloric acid is neutralized by the lime, and the carbonyl-chloride—which probably causes the sickness—is resolved into carbonate and chloride of calcium.

$$COCl_2+Ca(OH)_2=CaCO_3+CaCl_2+{}_2H_2O.$$

Perfectly pure chloroform is said to be a much less stable body than chloroform containing alcohol.

Prevention of Accidents. — Arnold[4] calls attention to the fact that a patient may take in a sufficient quantity of chloroform-vapor in one or two deep inspirations, over which the anæsthetist has no control, to endanger the centres of respiration. The secret of safe administration is a very gradual increase

[1] Vierteljahrsschrift f. gerichtl. Med., Dritte Folge, B. 8, Supplement, H., p. 94.
[2] Monograph, Milan.
[3] Lancet, Jan. 23, '97.
[4] British Med. Jour., Dec. 12, '96.

supplied to the patient while putting him under. Once the patient is under, the amount must be reduced to the minimum, continuing to supply him constantly; anæsthesia may thus be maintained continuously for hours with perfect safety.

Treatment of Collapse.—S. T. Reid[1] highly recommends strychnine in the treatment of chloroform collapse, and cites a case of chloroform poisoning in which nearly half a grain of strychnine was injected; prompt recovery ensued. The tabloids of strychnine were used; strength, $^1/_{50}$ grain; of these 22 were used, making the total just under the half-grain. The great value of strychnine lies in its virtue as a stimulant to the respiratory centre; it thus maintains life while the vapor is being exhaled. The drug, howeve., must be used boldly.

The use of the electrical current in acting upon the respiratory centre at once, and by increasing the current rapidly, also keeps the respiratory mechanism in action during the dormant stage of strychnine immediately after the injection is given. Dr. Reid contends that with these two agents at hand one ought to be able to treat any case of chloroform poisoning with success.

CRETINISM.

The evidence at present available warrants, in the opinion of William Osler,[2] the conclusion that the changes characteristic of cretinism, endemic as well as sporadic, result from loss of function of the thyroid gland.

Treatment.—Thyroid Gland.—Case of cretinism, after two years' treatment by J. P. West,[3] very remarkably improved. During the first year of treatment an attempt was made to keep the child on as large a dose of the thyroid extract as possible. It was found after trial that the child did best on 1 grain a day. After nine months $1\,^1/_2$ grains (Parke, Davis & Co.), twice a day. During the first year of treatment she grew eight and one-fourth inches and gained fourteen pounds,—*i.e.*, nearly doubled her weight. After she had been under treatment a year, the thyroid was stopped for three months, and during that time the peculiar appearance of the cretin returned, and she became much more stupid. She was then put back on $1\,^1/_2$ grains a day, and this was kept up until the first of this year. Since then she has had $1\,^1/_2$ grains twice a week, on alternate weeks.

Case of advanced cretinism in Hindoo boy treated by thyroid extract by H. E. Drake-Brockman.[4] Thyroid treatment was begun by administration of 3 grains of the dry extract by the mouth daily. Thyroid enlargement diminished fully two inches in the space of one month; the lad, both physically and mentally, has shown marked improvement. Dose increased to 5 grains daily. Marked and steady improvement continued, but marked absence of patellar reflex,—a prominent symptom in tabes dorsalis, in which Brown-Séquard has used orchitic fluid; administered to patient 5 grains of didymin daily as well as the thyroid extract. After a fortnight signs of the reflex returning; patient became much stronger on his legs.

According to T. Telford-Smith,[5] during thyroid treatment the rapid growth of the skeleton leads to a softened condition of the bones, which results in a yielding and bending of those which have to bear weight; as cretins under

[1] British Med. Jour., Nov. 20, '97.
[2] Amer. Jour. Med. Sciences, Oct., '97.
[3] Pediatrics, Nov. 15, '97.
[4] Lancet, Oct. 2, '97.
[5] Lancet, Oct., '97.

treatment become more active and inclined to run about, this tendency to bending has to be guarded against. If any bending of the bones of the legs appears, the child should not be permitted to walk for a time, or the legs should be supported by light splints. The diet should be generous, and the child should get plenty of sunlight and open air. The administration of codliver-oil and Parrish's food would probably prove beneficial at the same time.

Mental change was brought about by thyroid treatment in cases treated by William Osler.[1] Even with a couple of months the alteration in the mental condition is noticed. The patients look much brighter and their faces are not absolutely expressionless. As a rule, the younger the case, the more marked is the mental change. Young cretins who have not learned to speak a word soon begin to talk in their play. In children between six and ten the effects are even more remarkable, and with the loss of the myxœdematous condition there is a corresponding awakening of the mental faculties. In older patients the treatment is not so efficacious. A grain of the desiccated gland three times a day in young cretins preferred. Its effects should be carefully watched, and the amount reduced if the pulse becomes more rapid or if there is fever. Older patients may take as much as 5 grains in the day, and the amount may be diminished as the symptoms indicate. Young patients bear the remedy very well, and in a few months, if no improvement is noted, larger doses must be tried. Unpleasant effects are less commonly seen than in the myxœdema of adults. After the disappearance of the myxœdema and the establishment of the processes of growth and development, a very moderate dose seems sufficient: one or two 5-grain tablets a week. Intermission for a month or six weeks does not seem to be followed by any striking change, but an intermission for a longer period is followed by symptoms indicating a relapse. (See also reports of 54 cases treated with thyroid gland and extract by various authors in the article on "Animal Extracts" in SAJOUS'S ANNUAL, vol. i, '98.)

Prophylaxis. — Thyroid extract was tried by A. Gordon Paterson[2] in the case of a young woman in her third pregnancy, who had given birth to two cretins in successive pregnancies. One tabloid taken every day during the last seven months of the pregnancy. At no time did she suffer from any discomfort; on the contrary, she was much better throughout than she had been in the previous pregnancies. The child was a fine healthy female, indistinguishable from any other infant in appearance. At the age of 5 months the infant was remarkably fine and intelligent and could sit up firmly. She is now able to stand and to say several words, though only 11 months old.

DIPHTHERIA.

Pathology.—J. J. Thomas[3] states that the heart is generally enlarged in this disease. Tachycardia is of serious import, death usually occurring when the pulse exceeds 150. Bradycardia indicates serious heart trouble; and irregularities of the pulse and systolic murmur occur in about 10-per-cent. of cases; a *bruit de galop* usually indicates a fatal termination. If no heart symptoms develop for four weeks, they rarely develop at all. In fatal cases alterations are

[1] Amer. Jour. Med. Sciences, Oct., '97.
[2] Lancet, Oct. 2, '97.
[3] Boston Med. and Surg. Jour., Feb. 10, '98.

found in the pneumogastric nerves and the weight of the heart is increased.

C. M. Hibbard[1] expresses the opinion that the chief changes in the nervous system are parenchymatous degeneration of the peripheral nerves, to which interstitial changes—hyperæmia and hæmorrhage—are sometimes added. Acute, diffuse parenchymatous degenerations in the fibres of the brain and cord may occur, or more seldom interstitial lesions of these structures; changes in the cells are rare. Parenchymatous or interstitial changes may be found in the muscles, especially the myocardium. Sudden death occurring from cardiac failure is probably due to the effects of the toxins upon the nervous structure of the heart. The fact that the posterior columns of the cord, more frequently than the anterior columns, exhibit changes in their fibres tends to show that these fibres have less resisting power, as they are frequently found affected in other diseases as well as in diphtheria.

Treatment. — Lindsey Porteous[2] reports that in a case of severe diphtheria in a girl 8 years of age the sight of the syringe almost caused a convulsive attack, and on no account would she permit it to be used. Porteous, after disinfecting a silver spoon by boiling, administered the antitoxin by the mouth, to which no objections were made. The results were entirely satisfactory both in this and three other cases. The author notes that antitoxin is not rendered inert by changes in the stomach, and that this is an easy method of treating nervous children.

J. W. Washburn[3] argues that the injection of antitoxic serum constitutes a specific treatment which is based upon accurate experimental observations. The amount of serum requisite to insure protection when administered after infection is much greater than that required when the injection and the inoculation are simultaneous: the longer the administration of serum is delayed, the greater the quantity required, and after a certain period, no amount, however large, has any effect.

The bacilli are almost entirely confined to the primary seat of invasion and much benefit may be expected from the local application of antiseptics, though it is doubtful how far they are efficacious in faucial diphtheria. For children a good plan is to thoroughly syringe out the fauces, the child lying on its side during the process (the same method may be employed for adults, but gargling is generally less disagreeable) with: formalin, 1 to 500 or 1 to 250; permaganate of potash, 15 grains to the ounce; saturated solution of boric acid; or chlorine solution, made by placing 4 drachms of chlorate of potash and 90 minims of strong hydrochloric acid in a stoppered bottle, and gradually adding 30 ounces of water. A solution of perchloride of mercury, 1 to 1000, in quantities of 2 or 3 drachms, may be used as a spray, and the same method of application may be adopted with formalin or other antiseptics. Sprays are less disturbing than syringing or gargling, but are not so efficacious.

Another method is to paint the throat, by means of a camel's hair brush, with perchloride of mercury, formalin, or with a solution consisting of a drachm of liquor ferri perchloridi in an ounce of glycerin. Another is to apply powders to the fauces with an insufflator: perhaps sulphur is the best.

If there is much pain a solution of cocaine (5 per cent.) may be applied with

[1] Boston Med. and Surg. Jour., Feb. 3, '98.
[2] Medical Record, Dec. 25, '97.
[3] Treatment, Feb. 10, '98.

a brush or as a spray, and the sucking of ice and application of fomentations to neck gives relief. In nasal diphtheria the various solutions recommended for gargles may be applied in the form of a douche.

On account of the danger of heart-failure, the patient should be kept in the recumbent position until convalescence is well established; he should not be allowed to get up as long as there is the slightest sign of irregularity or weakness of the pulse. Plenty of easily digestible, nourishing food should be taken, and a certain amount of alcohol may be allowed.

No drugs have a direct influence upon the course of the disease, but a mixture containing iron and strychnine is, perhaps, useful as a routine treatment.

Persistent vomiting is a serious complication, and often exceedingly difficult to control. It is best treated by careful feeding; but, should this fail, a complete rest should be given to the stomach, the patient being fed by nutrient enemata.

Cardiac complications are most serious. In simple cardiac failure, the organ becomes irregular or intermittent, and the pulse weak, and either rapid or abnormally slow. In another type the symptoms are more allied to those of angina pectoris; in addition to cardiac failure there are attacks of abdominal pain or vomiting. Abdominal pain should always be viewed with anxiety, and the condition of the heart carefully observed. In case of cardiac complication the patient should be kept absolutely quiet in the recumbent position. In simple cardiac failure, cardiac stimulants are sometimes of decided benefit: strychnine, caffeine, and digitalis. In the anginal type belladonna appears to have a beneficial influence.

In cases of diphtherial paralysis the patient should be kept in bed as long as the paralysis is progressive, especially as there is danger of the heart becoming affected during this period; when the paralysis has been stationary for a fortnight or three weeks, the patient may be permitted to get up. Here iron and strychnine are useful, while belladonna sometimes appears to arrest the spread of the paralysis. Galvanism and massage will assist in restoring the muscles to their normal condition, but should not be resorted to as long as the paralysis is progressive.

In paralysis of the nerves of the pharynx and larynx, asphyxia may be caused by the impaction of food in the larynx, or broncho-pneumonia by particles of food getting into the lungs. When food sets up choking or coughing, the diet should be restricted to jellies.

In paralysis of the abductors of the cords and danger of dyspnœa, it may be advisable to perform tracheotomy or intubation.

When the secretion of urine is diminished an attempt should be made to stimulate the kidneys by dry cupping the loins, by application of poultices, and by digitalis and caffeine.

Directly there is any indication of laryngeal obstruction, the patient should be placed in a tent with the air warmed and moistened by means of a steam-kettle. In children, attacks of dyspnœa are often checked by a hot bath. Should obstruction to respiration appear, tracheotomy or intubation may be performed; tracheotomy is decidedly to be preferred. It is inadvisable to perform tracheotomy unless the services of a skilled attendant can be obtained, who is capable of putting in the tube when displaced, or of keeping the trachea open

with forceps until the medical man has arrived.

As regards intubation, Trumpp[1] expresses some doubt as to its universal value. Few, also, he thinks, know how to properly remove the tube. There are disadvantages attending the thread method, and especially because the fixing of the tube thus produced does not permit of its free play, and hence causes erosion of the parts. The extractor, on the other hand, is hardly possible in private practice, as a sudden stoppage of the tube by membrane may cause suffocation unless the tube can be withdrawn without delay; it also requires considerable skill, especially where a small tube sinks deeply into the larynx. Where attempts at extraction cause a small tube to sink further down, press with the thumb on the trachea, just below the cricoid cartilage, where the end of the tube can be felt, when the cough thus produced forces the tube out; this method of expression never fails. The pressure may be made with both thumbs, the fingers finding support on the neck; it should be directed inward and directly upward; and, if more powerful pressure is exerted, the tube may be forced, not only into the mouth, but even completely out of it. No disadvantages attend this method.

GONORRHŒA.

Treatment.—Argonin, a soluble silver-albumin salt, prepared by mixing sodium casein with silver nitrate and then adding alcohol until precipitation occurs has been used with success in gonorrhœa by Jadassohn in 1895. In 9 cases out of 12 treated by Lewin the gonococci disappeared within two to six days after the beginning of the treatment, and subsequent bacteriological researches did not reveal the presence of the organism again. Hence, argonin is destructive to the gonococci; and it has the advantage over all other antiseptics in not causing any irritation in the urethra. It can, therefore, be applied in the earliest stages of the disease. Bender also used it with great success in seventy-two cases of males, and one hundred and fifty-eight females. The urethritis in both sexes rapidly subsides during its use, and the patient is more speedily restored by this treatment than by any other drug extant, as the gonococci are destroyed between two and six days.

Argonin was employed by Christian[2] in ninety cases of gonorrhœa, eighty being acute: used in 5-per-cent. solution by the patient as a hand injection, the fluid being held in the urethra five minutes after each operation.

The author concludes:—

1. That it is absolutely unirritating and can be used in solutions of from 1 to 10 per cent.

2. In the great majority of cases it lessens the discharge very rapidly.

3. Its use is generally followed in a short period by a disappearance of the gonococci.

4. That this disappearance of the gonococcus is not in all cases permanent; in other words, there is in quite a large proportion of cases a distinct tendency to relapse, with reappearance of gonococci.

5. That it possesses distinct value as a hand injection in the stationary period of the disease, but is of very little benefit in the mucous stage, or stage of decline.

6. It produced no results in the treatment of chronic anterior urethritis.

Pontoppidan,[3] in order to abort the

---

[1] Munch. med. Wochenschrift, Jan., '98.
[2] Therapeutic Gazette, July 15, '97.
[3] Ugeskrift for Lager, '97.

disease, first disinfects the urethral orifice; then, after micturition, a few drops of a solution of silver nitrate (1 to 50) are introduced, by means of Guyon's instrument, into the fossa navicularis. This method is only employed when gonococci are found; when the deeper parts of the urethra are not yet affected; when the deeper layers of the mucosa are in a healthy state, no evidence of pain or infiltration being present; and when the cases are recent and have not been subjected to any treatment. From 1891 to 1896, inclusive, one hundred and twenty cases were found suitable for treatment in an abortive way, and fifty-two successes were secured. The method is quite harmless, and only once was any trace of blood found in the discharge.

In one hundred and five cases Orville Horwitz[1] gave 2 grains, three times daily, of methylene-blue, with nutmeg to diminish the chances of diarrhœa or strangury. This caused lessening of discharge in four or five days, and its cessation at the end of two weeks. Copaiba and sandal-wood were also administered. When unpleasant results followed administration of the methylene, the dose was reduced one-half. The drug will not abort gonorrhœa, and was of little avail when the gonococcus could not be demonstrated.

OBESITY.

Treatment.—The selective action on adipose tissues shown to attend the increased metabolism brought about by the use of thyroid extract and the decided increase in the nitrogen excretion sustain the use of this agent in obesity. The effects have been irregular, however, some patients responding readily to the influence of the remedy, but others not doing so. The views of French authors in this particular perhaps afford an explanation, namely: young, vigorous, and plethoric subjects who are good livers, receive little or no benefit from thyroid treatment, but are benefited by a dietetic regimen. On the other hand, fat persons that are pale, soft, and flabby, and inclined to œdema, receive benefit from the ingestion of the thyroid gland. They lose weight rapidly, oxidation is increased, and nutrition is improved. We are again brought face to face with conditions showing some of the elements of myxœdema.

Besides the dangers attending the use of thyroid in any case, the only source of untoward effects is the giving of large doses at first, the organs, especially the heart, being thus exposed to the effects of undue reaction. In appropriate cases, the remedy is taken without trouble, and the effects soon show themselves. After a time the reduction in weight is proportionately smaller, and discontinuance of the treat ment is followed by recurrence, in the great majority of cases, until the former weight is reached. To maintain the advantage gained, however, dieting and small doses of thyroid at longer intervals may be utilized with advantage. Charrin obtained a reduction of forty pounds in one of his cases, but was disappointed in two others, doubtless because they had not been properly selected.

Frederick Guttmann observed that palpitations and fainting fits followed the use of large dose.

PERICARDITIS.

Diagnosis.—There is a quadrilateral-shaped, dull area at the posterior thoracic base in cases of pericardial effusion, which is of material aid in diagnosis, and

[1] Phila. Med. Jour., Feb. 19, '98.

termed by Ewart[1] the "pericardial dull patch." It extends vertically from either the ninth or tenth rib, according to the amount of the effusion, to the twelfth rib, and horizontally from the spine to a point just within the angle of the scapula on the left side, while on the right side it does not reach more than half the distance. The outline of the dullness is well defined, giving the mapped-out area a definite, quadrilateral shape. Under normal conditions the area is resonant on percussion; but the occurrence of a pericardial effusion tends to diminish the factors which normally give a resonant note over this area and to increase the factors producing dullness. The following are the most likely influences: 1. A slight upward displacement of the compressed base of the lung. 2. A slight downward displacement of the anterior portion of the left hepatic lobe under the weight of the pericardial effusion without any marked depression of its posterior portion. 3. A corresponding depression of the stomach, with or without slight depression to the left. This "pericardial dull patch" is essentially of hepatic origin, owing to the change produced in the position of the liver, and is not the dullness produced by the effusion itself. It occurs normally in children under four years of age and is due to the greater size of the liver and to the shortness of the lung, allowing the former to come more directly into contact with the post-thoracic wall. It may also be found sometimes in phthisical patients where the left lung is contracted. Nevertheless, the sign is a very valuable one in the diagnosis of pericardial effusion. While cardiac hypertrophy might give the same sign, it was not met with in simple enlargement.

William Broadbent[2] declares that partial adhesions may give rise to neither symptoms nor physical signs, and even adhesions involving the entire surface of the heart may be attended with little or no interference with functional efficiency, and, therefore, with no appreciable hypertrophy or dilatation, or disturbance of circulation calling attention to the heart, provided there is no outside adherence of the pericardium to the chest-wall. It is a mistake, however, to suppose that the absence of symptoms or signs deprives the lesion of any importance because (though under normal circumstances the action of the heart may not be impeded) it may hamper the right auricle or ventricle in case of bronchitis, or interfere with compensatory hypertrophy of the left ventricle in renal disease or other condition attended with high arterial tension. Still more it may aggravate the effects of valvular disease or the degenerations of old age.

Broadbent, also, calls attention to the post-mortem records at St. George's Hospital, London, between 1890-'93, which show that, of 87 cases of heart disease, 31 gave evidences of adherent pericardium. He quotes Sturges's figures from the Great Ormond Street Hospital, where, of 100 cases of heart disease, only 6 were free from pericardial adhesions. He also points out that the size of the heart in this condition varied greatly. Sometimes normal or less than normal, in size it was usually enlarged, being hypertrophied and dilated. In 6 cases which he has collected the diagnosis was made during life and confirmed post-mortem; they proved rapidly fatal. The myocardium is also frequently affected. He calls attention also to the early onset of cardiac dullness due to cardiac dilatation. This

[1] British Med. Jour., Jan. 23, '97.
[2] British Med. Jour., Jan. 15, '98.

diminishes as convalescence supervenes; but, if adhesions form, the dilatation may be rendered permanent. If, therefore, the heart remains enlarged, he infers that adhesions have formed before the organ had time to regain its proper size. The indications which suggest the existence of adherent pericardium are: the persistence of the pericardial rub for a long time; the persistence of cardiac dilatation and a prolonged convalescence, especially if marked by a temporary improvement followed by unaccountable recurrence.

Treatment.—J. B. Roberts[1] adduces further evidence in favor of his contention that pericardial effusions should be treated in the same manner as pleural effusions, paracentesis being insufficient to cure suppurative pericarditis. Incision and drainage are essential, and should be executed as soon as the diagnosis of pus in the pericardium is made. The diagnosis of the purulent character of the effusion is determinable only by exploratory puncture. This should be done at the upper part of the left xiphoid fossa, close to the top of the angle between the seventh cartilage and the xiphoid cartilage. Pericardiotomy should then be done after resection of the fourth and fifth costal cartilages, raising a trap-door of these cartilages and using the tissues of the third interspace as a hinge. The mammary vessels and pleura are thus exposed and pushed to the left. The prognosis is good after pericardiotomy for pyopericardium. The author gives a list of 26 collected cases showing 10 recoveries and 16 deaths. Of the fatal cases, 9 were septic, and all the others which died had complicating lesions,—pulmonary, cardiac, or renal.

C. B. Porter[1] contributed an illustrative case operated on the manner described by Roberts. The patient was in excellent health and able to ride a bicycle a considerable distance without fatigue. The author states that the operation is indicated in all cases of purulent pericarditis. The operator should avoid opening the pleural cavity, open the pericardium opposite the point where drainage would remain good after contraction of the sac, and secure permanent free drainage.

PERNICIOUS ANÆMIA.

Diagnosis. — Byrom Bramwell[2] analyzes in an instructive manner a typical case characterized by very rapid development and no known cause, intestinal or other. The notable features were:—

Absence of organisms in the blood. (The author recognizes, however, that this by no means proves that in all cases of pernicious anæmia micro-organisms are absent from the blood.)

Presence of Eichhorst's corpuscles in the blood. These small, deeply-stained corpuscles are, in his experience, rare. He had never seen them so numerous as they were in this case.

Intensity of jaundice; yet the stools were of a deep-orange and the urine only contained a faint trace of bile.

The urine was never very dark.

Absence of parasitic organism in the stools.

Temporary presence of albumin and a few hyaline tube-casts in the urine (the temporary presence of albumin is, in his opinion, quite exceptional in cases of pernicious anæmia. The hyaline casts were probably the result of the jaundice.) In his experience—and this important clinical fact is not, he thinks, sufficiently known—hyaline casts are almost invariably (he is disposed to think in-

[1] Med. News, May 8, '97.
[2] Lancet, July 24, '97.

variably) present in cases of well-marked jaundice.

Copious uric-acid deposits in the urine. The author had met with one or two other cases of pernicious anæmia in which large quantities of uric acid were deposited in the urine; in one case the patient suffered from recurring attacks of gout.

Absence of any degree of cardiac dilatation and of cardiac murmurs. (Regarding the extreme degree of the anæmia, these were remarkable features of the case, and are, perhaps, explained by the rapidity of the course of the disease and the short time that it had been in existence when the patient came under observation.)

W. B. Ransom[1] notes that blood destruction always plays a part in the pathogenesis, but evidence shows that disease of the normal hæmogenetic tissues, in spite of compensatory activity of the medulla of the long bones, without increase of the normal hæmolytic processes, can also produce the same group of symptoms. Pernicious anæmia may be due to increased hæmolysis caused by toxins absorbed from the digestive tract or elsewhere, or to excessive fragility of new-made red corpuscles with normal hæmolysis.

G. von Voss[2] states that in cases of pernicious anæmia the degenerative changes in the cord sometimes observed are not the result of mere anæmia, but are more probably the result of hitherto undiscovered chemical agents. A thorough examination of the metabolism in pernicious anæmia might, perhaps, throw further light on the question.

J. B. Coleman[3] records a case, aged 67, admitted to hospital complaining of weakness and dyspnœa. The patient had been growing pale and weak for two or three months, during which time he had occasional attacks of diarrhœa and vomiting; extremely anæmic; temperature from 99° to 101° F.; urine normal in quantity and acid in reaction, without sugar or albumin, but giving urobilin spectrum and a marked indican reaction; urea, 2 per cent. His blood was of a specific gravity of 1034; fresh specimens showed great variation in size and shape of red cells, which had no tendency to form *rouleaux*. Hæmoglobin reduced to 30 per cent. of normal; red cells, 1,000,000, and subsequently 800,000 per cubic millimetre; only 1100 white cells per cubic millimetre, but on the day of his death they mounted to 21,000. Stained blood-preparations showed poikilocytes, megalocytes, microcytes, and necleated red cells, the latter comprising both gigantoblasts and normoblasts; some red cells had lost their hæmoglobin, and others showed polychromatophilic changes. He died three weeks after admission.

Treatment.—Arsenic was tried, but had to be discontinued; gastric sedatives, intestinal antiseptics, rectal injections of water, oxygen inhalations, and nutrient enemata. The post-mortem disclosed no lesion to account for the anæmia.

Byrom Bramwell obtained a remarkably rapid recovery, both in the condition of the blood, the jaundice, and other symptoms, but very large doses of arsenic were administered. Indeed, for several days the patient took no less than from 50 to 60 minims of Fowler's solution in the twenty-four hours.

Blumenau[4] refers to a severe case of pernicious anæmia, complicated with œdema, ascites, and cardiac symptoms,

[1] British Med. Jour., Jan. 8, '98.
[2] Deutsche Arch. f. klin. Med., vol. lviii, p. 489, '97.
[3] Pediatrics, June 15, '97.

in which 2¾-ounce doses of fresh bone-marrow, administered daily in soup or on bread, brought about a cure in two and a half months.

Alex. McPhedran[1] relates the case of a man, aged 55 years, in whom blood-count showed 480,000 per cubic millimetre; hæmoglobin, 20 per cent. There was delirium, vomiting, and diarrhœa. Treatment by subcutaneous injections of normal, saline solution on every alternate day, and the intervening by saline enemata, with arsenic internally. The patient, at the time of the report, was practically well.

["Cure" in pernicious anæmia cannot be applied to any case until at least two years after cessation of treatment. Tendency to recurrence is one of the most prominent features of the disease.]

RHEUMATISM.

Though nothing very new has been evolved as regard rheumatism, in any of its forms, during the past year, a great deal of old material has been revamped and more thoroughly worked over, and to considerable advantage. The question of its bacillary origin is still a moot one, and has resulted in some confusion owing to researches *per se* imperfect in character and prematurely announced, and also owing to different results accruing to the studies of different individuals.

Acute Articular, Bacteriology. — Achalme[2] describes a bacillus isolated in twelve cases of acute articular rheumatism. It is a large rod not unlike that of anthrax with which it has perhaps been confounded. In culture media it forms filaments of variable length; is strictly anaërobic, slightly motile in young cultures, and forms terminal spores; stains well by the ordinary aniline dyes and also by the methods of Weigert and Gram; can be cultivated, anaërobically in the ordinary culture media, giving whitish growths with the formation of gas; milk is coagulated. Grows well between 30° and 35° C., but not below 25° C. or above 40° C.; liquefies gelatin, produces acids, and ferments saccharose without inverting it. Inoculated into animals it produces dilatation of the arterioles and thrombosis, negative chemotaxis, a serous effusion into the cellular tissues, and congestion and hæmorrhages into the serous membranes and viscera. It is pathogenic for the guinea-pig, mouse, and rabbit, but not for the dog.

A. Riva[3] made researches in the same direction. Noting the different results obtained by different bacteriological examinations and the frequent negatives, he decided to employ a different culture medium, the chief characteristic of which is that it contains synovial fluid taken from the joint of a horse. Employing this, and using agar as a control, he obtained cultures that showed upon microscopic examination rounded bodies to which he has given the name of pseudospores. These are gradually replaced by two kinds of bacilli that are briefly described. He is very cautious in drawing conclusions, but is inclined to believe that the pseudo-spores or their bacilli are the cause of acute articular rheumatism.

Triboulet and Coyon,[4] in December last, reported to the Paris Academy of Medicine that they had made sundry researches to find Achalme's bacillus in the blood in acute rheumatism, and in every case were able to isolate and cultivate a special kind of diplococcus completely different from the organism

[1] Canadian Pract., Nov., '97.
[2] Ann. de l'Inst. Pasteur, xi, p. 815.
[3] Centralblatt fur innere Medicin, Aug. 14, '97.
[4] Lancet, Jan. 15, '98.

sought. Twice, however, they found the latter associated with the other and in each case the rheumatism was very severe and complicated. They also found the diplococcus in cultures made from a body which had upon post-mortem examination yielded Achalme's bacillus. It is an oblong coccus always occurring in pairs, about two microns in diameter, to some extent anaërobic and not decolorized by Gram's method. Achalme's bacillus seems to accompany the graver forms of rheumatism and to be the special cause of complications.

Singer,[1] of Vienna, also examined ninety-two cases of acute rheumatism with a view of discovering if possible a specific bacillus, and in a great number ascertained the presence of staphylococci and streptococci. He remarks post-mortems explain why arthritic effesions in acute rheumatism are often found to be free from microbes, for here the bacteria may reside solely in the periarticular tissues. Still he believes the forms just mentioned are the actual cause of acute rheumatism and acute rheumatic arthritis, as these evidence their pyæmic nature by a marked relationship to erythema multiforme, sore throats, etc. He cannot accept the view that the salicylates are actually specific.

Jaccoud[2] insists that the infectious nature of rheumatism is beyond doubt when its mode of evolution, its diffuse character, and the fact there is intrauterine transmission from mother to fœtus are taken into consideration. In many cases some preceding local process has been observed serving as a point of invasion to the organism (whatever it may be) that is the cause of acute rheumatism. Among these, the most important is tonsillitis, and a striking fact is that the organisms found are exactly the same as those occurring in the tissues which are the seat of the location. The pharynx, tonsils, in fact any tissue showing a lesion, may allow the organism to enter.

Etiology, Chronic Rheumatism. — Chvostek,[3] at the Congress für innere Medicin, stated there is no ground for supposing chronic rheumatism to be of bacterial origin; the great variability in the course of the disease is strongly opposed to any such view. The only two characteristic features of the disease are the joint swellings and the transitory duration of these. The most satisfactory explanation is to regard the symptoms as due to toxins, which are produced in the body but are not produced by micro-organisms. Bacterial invasion gives rise to a very different kind of joint inflammation, characterized chiefly by its long duration, and the large amount of swelling which accompanies it.

Diagnosis, in Children. — That the risk of cardiac complications in acute rheumatism is in inverse proportion to the age of the patient is well known, and W. B. Cheadle,[4] recalling this fact urges the great importance of making an early and correct diagnosis in children. The mistakes made in diagnosis arise chiefly from the fact that in early youth the symptoms of arthritis—acid sweats and pyrexia—are less prominent; arthritis is at its minimum, endocarditis, pericarditis, chorea at their maximum; pleurisy, tonsillitis, and the vasomotor and hæmorrhagic phenomena, the erythemata and purpura, are more common, tending to decline as puberty is passed. There is also a special tendency in children for the various phases of the affection to arise independently and

[1] Berliner klin. Woch., No. 31, '97.
[2] Jour. de Medécine de Paris, Apr., '97.
[3] Fortschritte der Medicin, June 15, '97.
[4] Treatment, vol. i, May 13, '97.

apart from one another. So an endocarditis or a pericarditis may arise in a rheumatic child not only without any accompanying joint affection but, in rare instances, without any recognized rheumatism phenomena to give warning. When endocarditis or pericarditis arises in a child there is always a strong primâ facie presumption that it is rheumatic. If, with the cardiac affection there is chorea, fibrous nodules, tonsillitis, erythema exudativum, pleurisy, whether these have occurred recently or have cropped up at intervals through months or years the cardiac inflammation is almost certainly rheumatic.

As the heart affection is so serious in children this organ should be carefully examined whenever any of the above-mentioned group of rheumatic symptoms are met with, and in every feverish attack, simple though it may appear, the condition of the heart must be regularly ascertained, for though the temperature may seem to have no rheumatic origin, it may in reality be due to this cause and be accompanied by serious cardiac inflammation.

Complications. — The complications that may be encountered in acute rheumatism are varied, as is well known, but Dickinson, of London, and Beach, of New York, chronicle two cases that are somewhat rare, if not unique. The former[1] encountered a case of mixed rheumatism and typhoid as supposed, which on convalescence developed diphtheria. The use of antitoxin caused a relapse of the rheumatism in its most serious form, including heart complications. With convalescence from the diphtheria, pneumonia developed to complicate the rheumatism, which followed a very painful and adynamic course, in turn complicated by pleuritic effusion. Recovery is credited to most excellent nursing rather than to other therapeutic measures employed. The rheumatism disappeared spontaneously with the pleuro-pneumonia.

Beach's case[2] had developed an orchitis from sleeping in a damp bed, followed by pain in the muscles of the legs and later by mild cystitis and urethritis; then there was an exacerbation of the swelling of the testicles followed by an attack of acute articular rheumatism. Careful search failed to show any evidence of gonorrhœal infection.

Steiner,[3] who apparently has no knowledge of the previous reports of Bury and others, gives brief notes of thirty-five cases in which there was tenderness over nerves and pain along their course. He suggests that in such there is an affection of the nerve sheath comparable to inflammation of the pericardium and pleura; further that many of the so-called rheumatic muscular paralyses may be thus explained; but that these perineuritic complications are not dependent upon the age and constitution of the patient, though females appear to be more liable than males.

Gilbert Bannatyne,[4] speaking of the fact that the question of heart affections in rheumatoid arthritis is one which has given rise to much discussion, quotes two cases which apparently go to prove that such is possible. Endocardial lesions, he thinks, are found with a comparatively greater frequency than is imagined; but he feels assured that pericardial lesions are less common than are supposed.

Treatment.—Foster[5] advocates placing between blankets and where the joints are affected wrapping them with

[1] Lancet. Jan. 15, '98.
[2] New York Med. Jour., March 13, '97.
[3] Deutsches Archiv f. klinische Medicin, vol. lviii, p. 237, '97.
[4] British Med. Jour., Jan. 15, '98.
[5] Pennsylvania Med. Jour., Feb., '98.

wool to promote excretion from skin. Moving the bowels freely in the early part of the attack, feeding on liquid, animal, well-cooked foods in small rations, giving from 8 to 12 pints of pure water daily, and keeping the atmosphere of the sick room dry, are the principal hygienic factors; in other words, moistening the patient thoroughly on the inside, conducting the moisture away from his body with wool, and dry atmosphere will cause the evaporation of much rheumatic poison without the aid of medicine. The remedies most useful are agents which have a distinctly preservative and antiseptic action on the tissues: quinine, tincture of iron chloride, potassium iodide, methyl-salicylates, phenyl-salicylate, sodium salicylate, acetanilid. The cold bath is probably one of the last, but not least useful remedies when there is hyperpyrexia, which resists other treatment. The local hot-air treatment also seems to be worthy of further investigation, for J. Black, of Detroit, reports favorably of it in several cases, though H. C. Wood notes that he has tried it with little success. Quinine is a remedy which sometimes succeeds when the more commonly used agents fail, but large doses are required. Iron is an agent of some value. Iodide of potassium combines an alkali with an antiseptic and is a valuable agent in subacute and chronic cases, but not useful in acute attacks. Methyl-salicylate is an agent which has gained in favor; it does not irritate the stomach, acts as a preventative of fermentation, is useful as a local application, and may be considered a fair representative of the salicylates. Elmer Lee treats the disease with rain-water only, and advises the drinking of three or four quarts every twenty-four hours, and reports a series of cases cured by this simple treatment. Turkish baths have a place in the treatment of both subacute and chronic rheumatism. The salicylates markedly influence temperature and pain in the early stages of acute rheumatism, and lessen the length of an acute attack, but they do not lessen the frequency of complications and do not prevent relapses.

Jaccoud[1] insists that grave consequences may result from the employment of sodium salicylate in acute rheumatism with visceral localizations, for it neither cures nor prevents them, but may favor production. The drug should be suspended when delirium sets in before the diagnosis of cerebral rheumatism is established, or if the delirium be of an alcoholic of hysterical nature, or result of any intoxication. In cardio-pulmonary complications the same is true. Salicylates lower the fever and relieve pain, but do not influence at all these localizations. By persisting in their employment, involvement of the myocardium is hastened.

H. W. Crouse[2] reports a case of diaphragmatic rheumatism treated by sodium salicylate, tincture of passiflora, tincture of bryonia, tincture of macrotis, hyoscyamine, and mercurials.

Eshner[3] often, in acute rheumatism, prescribes strontium salicylate instead of sodium salicylate. He claims the former is not likely to irritate the stomach as much as the sodium salt, while it has the same action, and is free from the effects of salicylism; the dose should be one-half more than the dose of the sodium salt, and on account of insolubility, it is usually best given in powder dissolved in hot water.

In the rheumatism of children Cheadle[4] believes full doses of sodium

[1] Lyon Médicale, March 14, '97.
[2] New York Med. Jour., Jan. 29, '98.
[3] Philadelphia Polyclinic, Dec. 11, '97.
[4] Treatment, No. 5, '97.

salicylate are not required; and they may be harmful from their depressant affects. "The milder drug, salicin, may be substituted in most cases in doses of 5 to 20 grains; or quinine in doses of 1 to 3 grains every four hours. In each case an alkali, sodium or potassium citrate, should be combined and given in doses according to age. The use of depressant drugs, as antipyrine, antifebrin, aconite, with a view of lowering temperature, cannot be too strongly deprecated.

"Gibson found that in acute rheumatism treated by rest escaped permanent heart-lesion in the proportion of two to one compared with those permitted free action. When pericarditis supervenes, if there is much pain and distress, one or two leeches may be applied to the præcordia; but anything like profuse extraction of blood is positively harmful. Small children do not bear much loss of blood. The most effective local application is that of the ice-bag.

"In the deadly form of cardiac inflammation, which is perhaps the most characteristic feature of the rheumatism of childhood,—persistent, recurrent, subacute endocarditis, and pericarditis,—opium, digitalis, and strophanthus, with an alkali, are the drugs of most service. Alcohol is also a most useful agent, as much from its sedative as by its stimulant property.

"As a last resource, in the case of older children only, when the heart shows signal signs of failure, when the first sound becomes short and feeble, and the pulse small and irregular, hypodermic injections of liquor strychniæ, combined with brandy or digitalis, afford the most powerful means of resting the flagging again. Usually, however, this only effects a brief rally and respite from the final collapse."

In rheumatoid diseases of the joints and tendons H. C. Wood[1] is of the opinion that the local, hot, dry-air bath which has been so much lauded, is of little value; that it has probably a field of usefulness in subacute gouty inflammations with deposits about the tendons and their sheaths, or parts outside of the joints, and is of great service in the treatment of ligamentous inflammations and in tenosynovitis, whether of rheumatic or of traumatic origin. He has tried all temperatures, but finally settled upon one ranging between 270° and 320° F.

Max Olny, of Halle,[2] tried phenocoll hydrochloride in acute articular rheumatism in sixteen cases, in doses of 15 grains three times a day. In three it failed; in all the others it acted promptly. In cases that were not of long standing the pain diminished after 8 scruples had been taken, and complete recovery after 6 drachms. The average time of treatment was thirty days, and better results were obtained than with salicylate of sodium. The influence of the remedy on temperature is reported as quite variable.

Sokoloff[3] reports four cases of articular rheumatism in children treated successfully by Roentgen rays. The child in each instance was covered with bedclothes, at a distance of fifty to sixty centimetres from the tube, then exposed to the action of the rays from ten to twenty minutes. In one case the symptoms disappeared after two exposures. In another, the pain and swelling of a knee-joint disappeared after a single exposure. The third was cured after three exposures. In a fourth case, which had had a damaged heart for five years, with an intensely painful and swollen knee-joint flexed to an angle of about 45°,

[1] Med. News, July 17, '97.
[2] N. Y. Med. Jour., Feb. 20, '97.
[3] Wratsch, No. 46, '97.

after every exposure the angle of flexion increased, and the pain was alleviated; and after four exposures it disappeared altogether.

An editorial writer in the February, 1897, number of the Therapeutic Gazette calls attention to the value of salicylate of methyl in rheumatic affections, and Siredy[1] especially praises it in articular rheumatism, applied locally: a procedure that is by no means news, having been advocated by Bochefontaine in 1879. In another contribution[2] he emphatically declares the salicylate of methyl must not be confounded with essence of wintergreen, as the latter product is much less pure and has not the same active property, besides having a more unpleasant odor, and being more irritating to the skin. The part having been washed is laid upon a sheet of gutta-percha tissue, and the salicylate now applied directly on to the skin over the affected joint drop by drop, and the gutta-percha tissue immediately brought over so as to completely envelop the affected part; a flannel bandage is then applied in the ordinary way. A thin layer of cotton-wool may be used if the patient does not find it disagreeable or hot. The salicylate dressing may be renewed twice in the twenty-four hours if the pains are very severe, and the quantity applied may vary from 50 to 120 drops according to circumstances. It does not produce any unpleasant effect on the skin, merely a slight degree of redness, which is painless and without irritation.

In acute polyarticular rheumatism the application of salicylate of methyl is well nigh impossible. Here Siredey would administer it internally in large doses. In subacute and chronic cases where fewer joints are affected, and these distally, salicylate of methyl seems to have extremely satisfactory results, being much more marked than those of salicylate of soda. The pains disappear in two or three hours after the first application. The existence of heart complications is no contra-indication. The same treatment is recommended for gouty arthritis.

Lemoine[3] also declares the salicylate of methyl as identical in action, but more prompt than that of salicylate of soda; the absorption by the skin is as complete as by the digestive tract, and the traces of salicylic acid found in the urine are the same as accompany administration of salicylate of soda in equal doses. The former has an immense advantage over the latter in that it acts more rapidly in controlling pain; furthermore, symptoms of intolerance are altogether exceptional; there is neither tinnitus, vertigo, nor deafness, such as so often accrue to the sodium salt, and which may be referred to the irritant action of the drug on the stomach. "Finally, salicylate of methyl, applied to the skin, has a more marked effect upon the local manifestations of rheumatism and upon associated neuralgia. The usual dose is about 120 to 150 minims of a solution of oil of wintergreen in spirit containing 40 per cent. of salicylate of methyl. The solution should be sprinkled on a thin pad or gauze applied to the skin over the affected part, then covered with a piece of oil-skin sufficiently large to extend beyond the edge of the pad or to completely encircle the limb; the whole being fixed with a bandage so as to make it practically air tight."

Vidal[4] is another who suggests compresses of either wintergreen essence or methyl-salicylate for the internal admin-

[1] Presse Med. Belg., July 28, '97.
[2] Jour. de Médecine, Aug. 25, '97.
[3] Treatment, Aug. 12, '97.
[4] Les Nouveaux Remédes, No. 20, p. 615, '97.

istration of sodium salicylate for patients whose digestive tracts it was necessary to spare; in a certain percentage various skin eruptions, ranging from simple erythema to recurring papular eczema, appeared. Fifty to 100 drops used upon a double layer of aseptic gauze covered with an impermeable dressing. "The natural and artificial essences are sold indifferently in the shops, and the former contains various hydrocarbons and 90 per cent. of methyl-salicylate, while the latter is pure methyl-salicylate made synthetically. Applications of each made upon the same subject showed that the latter did not produce any cutaneous disturbance. It is probable that the eruptions caused by the former can be explained as due to the undetermined resins contained."

Chronic Articular Rheumatism.—At a recent meeting of the German Congress for Internal Medicine, Bäumler[1] showed that the chronic articular rheumatism of French authors was, in Germany, the chronic form of acute articular rheumatism and corresponded to arthritis deformans; that this term arthritis deformans was understood in a different way by physicians and surgeons. In order to avoid confusion and to establish an absolute distinction between acute articular rheumatism and chronic articular rheumatism, he proposed to designate under the term arthritis deformans or polyarthritis deformans, the cases of chronic arthritis of subacute evolution which are often prolonged for many years, habitually apyretic, attacking a large number of articulations, and cause very profound deformities therein.

The cause or causes of polyarthritis deformans not yet known.

Bäumler thinks the bacteriological researches of Schüller, Bannatyne, and Wohlmann furnish a basis for a hypothesis of infectious etiology.

Treatment of Chronic Articular Rheumatism.—Ott[1] believes the therapeutic measures may be divided into three classes: When the disease results from disturbance of nutrition characterized by an excessive production of acids, combat by large doses of alkalines. When the nervous system, treat with nervines, electricity, hydrotherapy, and tonics. When supposed to be of infectious nature, administer antiseptics internally and externally. The antiseptic treatment is, in a general way, the one which gives the best results. In acute exacerbations rest in bed and careful diet are indispensable; Priessnitz's compresses and wrapping the articulations in cold bandages render great service. Painting the articulations with methyl-salicylate also recommended. When the pain is very violent, narcotics may be used without danger. As a revulsive, tincture of iodine is useful and harmless. When articular effusions are very abundant and prolonged it is necessary to puncture the articulation. Salicylate preparations, colchicum, and salol are to be given. During the chronic period it is especially necessary to cause absorption of accumulated exudates by external means. Revulsives are employed, such as tincture of iodine and ichthyol. If articular effusion existed, the articulation is to be compressed. Baths should be employed only when all symptoms of irritation have disappeared. Hot baths, sand baths, and mud baths are particularly indicated. Diaphoretics may also be added; also douches, massage, and electricity. To ameliorate the general condition, quinine, iron, codliver-oil, potassium iodide, ichthyol, tincture of

[1] La Presse Médicale, July 3, '97.

iodine, and arsenic should be administered internally. In cases of grave alterations of the articulations, when the local processes are allayed, surgical intervention is sometimes indicated, such as resection of the capsule, osteotomy, etc.

Schüller[1] notes in the treatment of chronic articular rheumatism that the joints contain little or no fluid, and never pus. In connection with the condition which he described in 1893 as polyarthritis chronica villosa, which should be clearly separated from acute articular rheumatism, he found a special bacillus which occurs as broad, short rods. He had made use of repeated injections into the joint, generally of: iodoform, 20; acid-free glycerin, 250-400; guaiacol, 5. This is to be injected with a syringe which has been treated in a steam-sterilizer. Twenty-nine cases treated; in sixteen the chronic inflammatory process and the villous mass completely disappeared. Pain regularly, but fever seldom, resulted from the treatment, and this disappeared within two days. More rapid cure follows opening of the joint, after fixation, with removal of the diseased synovial membrane and the villous mass; the wound must then be sutured and the same material injected. The sutures and fixation apparatus removed after ten days, and about the same time motion is permitted; later, electricity, massage, inunction, and baths. The results are absolutely normal, movable joints.

TYPHOID FEVER.

Pathology.—William Osler[2] lays stress upon the generally overlooked fact that typhoid fever is a general infection with special localizations in the lymphatic tissues of the intestines, in the mesenteric glands, spleen, liver, and bone-marrow. He has not infrequently seen most malignant cases with but slight involvement of Peyer's patches, and he describes a case in which there was a general infection without involvement of the lymphatic tissues of the intestine, although pure cultures of typhoid bacilli were obtained from the pneumonic lung, spleen, and from other organs.

Treatment.—Many physicians now believe that the key to the situation in treating typhoid fever is to be found in the intestines, an opinion which Osler considers as wrong in the worst possible way, in principle as well as in practice. Without minimizing the importance of the enteric symptoms or avoiding all medicines unless specially indicated, he recalls the fact that a large proportion of all cases do perfectly well without any interference with the bowels. In a series of 99 cases, pain in the bowels was complained of only in 23 cases, and it was rarely severe.

Cold-bath Treatment.—F. E. Hare[3] reports 1828 cases treated under the expectant plan during a period of five years with a mortality of 14.8 per cent., while under cold bathing carried out in 1902 cases, there was a mortality of but 7.5 per cent. Of the 143 fatal cases in the last series, 56 died from perforation and 23 from hæmorrhage, which, as compared to those dying from the same causes under the expectant plan, which used to cause only about one-fourth of the total deaths, would indicate an increase to more than one-half.

Solomon Solis-Cohen[4] states that systematic bathing in cold water after the method of Brand is not always necessary, nor is every case bathed best treated by undeviating adherence to Brand's

[1] Verhandlungender xv Con. für innere Medicin zu Berlin, vol. cxxvii, '97.
[2] Phila. Med. Jour., Jan. 1, '98.
[3] Australasian Med. Gaz., No. 186, p, 111, '97.
[4] Phila. Polyclinic, Dec. 4, '97.

method. Water, however, should be used freely in every case, both internally and externally. In cases that promise to be severe, if seen before the tenth day, he advises systematic plunging in cold water, and that the directions of Brand should be followed. Between the tenth and twelfth days, however, it is doubtful whether plunging should be begun. After the twelfth day, plunging begun earlier, should be continued or discontinued according to circumstances. When plunging is not well-borne, frequent cold or cool sponging should be carried out, partly to reduce temperature, but largely to promote general metabolism, to stimulate excretion, and to keep up the tone of the peripheral vessels.

As to the frequency, when the temperature in the mouth does not exceed 103° F., the patient may be sponged every second or third hour, with water at a temperature of 70° F., which may, if necessary, be gradually reduced to 50° F. in the course of ten to twenty minutes.

When the temperature exceeds 103° F., sponging must be done at least every second hour, and the temperature of the water be correspondingly lowered; 60° or even 50° to begin with, and rapid reduction to 32° being useful at times.

The effects on temperature, pulse, respiration, excretion, sleep, and general comfort must be the guides as to the time, temperature, and other details of the application; as a rule, patients should be allowed to sleep undisturbed for about four hours, even when applications are being made every second hour during wakefulness.

To prevent or control tympanites or hæmorrhage, the continuous application of ice to the abdomen—usually over the right iliac fossa—is useful. In cases of severe nervous and cerebral symptoms or very high temperature there may be continuous application of ice to both head and abdomen. The patient should be encouraged to drink cool water freely and frequently. Ice-water should not be used; the temperature of the beverage should be that found to be most refreshing to the patient.

J. T. Wheeler[1] states that in 120 cases of typhoid covering a period of twenty-three years of practice, exclusively by cold sponging, he has had but 1 death. He regards hæmorrhage from the bowels as a contra-indication to bathing. He considers it most important that the cold-bathing should be instituted early in the disease.

J. F. Toughy[2] reports a remarkable case in which, on four different occasions, the temperature chart reached the extraordinary height of 117° F. On two of these occasions the thermometers burst at the bulb with the mercury at the very top of the column. The case being such a remarkable one, Surgeon-Major L B. Ward was requested to verify the temperature, and he found it on the forty-fourth day of the disease to register 114° F. For weeks the temperature was taken every fifteen minutes, as it used to run up in an incredibly short time, and it was felt that death must take place if hyperpyrexia were not controlled. The patient's ultimate recovery is ascribed mainly to the rapidity with which the temperature was brought down. The patient usually knew when the hyperpyrexia was coming on, and entreated to be put into the pack. She felt as if her heart "would burst with heat" and as if she had a tight cord tied round her waist. The author, "in common with many others," found the administration

[1] Medical News, Feb. 5, '98.
[2] Indian Lancet, May 16, '97.

of antipyretics disappointing, and has been forced to the conclusion that they are often injurious, and seldom to be depended upon in cases of hyperpyrexia. The snow-water pack never failed to bring down the temperature, and it was repeated every time the hyperpyrexia came on.

Internal Washing.—Internal bathing—*i.e.*, obliging the patient to drink as much as he will of inert liquids (teas, slightly-acid drinks, weakly alcoholic beverages) and giving a daily lukewarm enema of from 1 to 2 pints—is strongly recommended by Duchenne.[1] The diet is milk (not bouillon, which is poisonous if the kidneys be affected; not starches or clear soup), 2, 3, or 4 pints being given with two or three weak alcoholic drinks, but never astringents, nor wine. Rapid diminution of the diarrhœa and of the fever, which rarely exceeds 102.2° F after the fourth day of treatment, with convalescence on the twenty-first day were obtained in 33 out of 35 cases reported.

Cold.—The value of applications of cold to the abdomen by means of ice-bags over the ileum and beginning of the colon, the object being to obtain as low and constant a temperature as possible near the lesions, is extolled by A. J. Downes.[2] As the continuous use of the ice-bag causes congestion and sometimes sloughing of the skin, the necessity for regulated intermissions is evident. Applications of an hour and a half with half-hour intermissions is the best method, the time during which the ice-bags are on and off making two hours. When the temperature rises to 103° F. the ice may be allowed to remain on an hour and three-quarters, the time off being reduced to fifteen minutes. In temperatures above 102° F., sponging with ice-water and alcohol during the intermission is an essential part of the system; even in moderate fever two spongings daily should be given. The idea is to inhibit the lesions to a degree at least, the arterial supply to the bowel being lessened by the stimulating action of cold on the arterioles. The efferent lymphatic vessels are also influenced, their calibre being diminished.

Prudden having shown that intermittent freezing and thawing continued but five times completely destroys bacilli, lowering the temperature of the bowel to or below 60° F., is thought to materially retard the culture process in the bowel. Again, cold thus brought in contact with intestinal coils, the innumerable vessels of the portal circuit are cooled; the cool blood passes through the liver, and emerges still cool from the hepatic vein, etc.: an antipyretic influence is thus procured.

Cold-air Treatment.—Dr. J. Murray-Gibbes[3] recommends—theoretically—cold air in the treatment of typhoid fever. The patient would lie on a tube mattress and be covered by a second one. When the temperature is to be lowered, a cooling mixture, ammonia, etc., would flow through the tubes, bringing down the temperature of the surrounding air, as is that of storage-houses. No handling of the patient would be necessary, while the shock attending the immersion in a cold bath would be avoided. Attached to the cold-mixture tube would be another tube which could convey hot water, so that warm water could at first flow through the tubular mattress, and then, by means of taps, be gradually lowered to the required degree. Dr. Gibbes does not doubt that the cold-air method he proposes will keep down the

[1] Bull. Générale de Thérap., 20e liv., p. 627.
[2] Therapeutic Gazette, Mar., '96.
[3] Australasian Med. Gaz., April 24, '97.

high temperature of typhoid fever, and so greatly lessen the death-rate. It could be more easily carried out than the cold-bath treatment and cause less disturbance to the patient.

Guaiacol.—Ketcher[1] claims to have obtained excellent results in twenty-nine cases of typhoid fever by the use of guaiacol. The course of the disease was considerably modified by its employment, either when used internally or externally.

It will be remembered that guaiacol was recommended by H. G. McCormick, who has used it in a large number of patients, varying widely as to age. The greatest number of times it was applied to any single person was 78, and the least number of times once. The largest dose was 25 drops and the smallest 2 drops. He obtained in one case a reduction of temperature from 106.8° to 101°, in two hours, by the application of 5 drops, with a reduction of the pulse-rate from 136 to 110, the respiration falling from 36 to 28.

The effect of guaiacol lasts from three to four hours; the oftener it is applied, the greater the effect. Care should be taken to commence with a small dose—10 to 15 drops—gradually increased if necessary. Given internally, guaiacol does not markedly reduce the temperature. Ten drops given internally does not materially affect the pyrexia, while the same amount thoroughly applied reduces the temperature to a marked degree.

Olive-oil.—Mr. Owen F. Paget,[2] while in Freemantle, West Australia, treated many patients who lived in tents and were unable to obtain fresh milk. In spite of this he had no deaths, while in those removed to the hospitals, where they were properly attended to and received suitable nourishment, the death ratio was high. Mr. Paget attributes his success mainly to the use of olive-oil. Nearly all the patients suffered from constipation or diarrhœa when they first came under observation; during constipation the typhoid bacillus develops its infectious powers. This is followed by diarrhœa and solution of fæcal accumulations. Being intensely irritating, the infectious fluids aggravate the condition of Peyer's patches, give rise to violent peristalsis and prevent rest of the inflamed tissues. A part of the fluid poured out, being reabsorbed and being saturated with ptomaines, induces constitutional disturbances, high temperatures, tympanites, exhaustion, delirium, abscesses and finally death. The problem, in the author's opinion, resolves itself into treating an inflamed and possibly ulcerated surface by rest and protection from irritating substances and collection of discharges. This he obtains by means of olive-oil. He gives it by injections into the bowel, a quarter of a pint to half a pint being used for the first four or five days at intervals of from twelve to twenty-four hours. The temperature almost always falls 1° F., and the patient becomes calm. After the fifth day it may be given every second day or left off entirely if the patient is having natural motions at least every twenty-four hours and if the temperature is steadily falling. If the patient does not respond to injections, the bowel being apparently empty, accumulation is to be suspected; the temperature runs up and the patient is seriously ill. He then gives olive-oil by the mouth: a large cupful at a time. The bowels almost certainly respond, and the injections may be continued. If the first dose is without effect, another may

[1] Therapeutic Gaz., Sept. 15, '97.
[2] Lancet, Nov. 27, '97.

be given after twelve hours. He considers olive-oil a perfect boon.

Salol.—According to Herbert Bramwell,[1] salol, when steadily and frequently given in small doses, either alone or combined with diaphoretics or astringents or other drugs, as indicated, until the urine has become slightly tinged, modifies cases which promise to result in a long and dangerous illness, so as to make them go through a mild and uncomplicated course of three or four weeks' duration.

Diarrhœa and Perforation.—For many years past Osler's[2] practice has been not to disturb the bowels in the course of the disease. With the exception of a few doses of turpentine for tympanites, or measures directed against hæmorrhage or active diarrhœa, he abstains from all active interference. Occasionally, for the constipation of convalescence, he gives castor-oil, but he never uses the so-called intestinal antiseptics. As a result, he points to the fact that in his 99 cases, diarrhœa occurred in only 12 cases, and that in not a single instance was it severe or protracted enough to require treatment.

In 5 cases there was hæmorrhage from the bowels, about the average percentage, but none of the cases died. There was no instance of perforation.

While gentle laxatives are not specially contra-indicated, Osler thinks free and active purgation at the onset of the disease is decidedly harmful. He quotes Graves's remark that "patients who have escaped active purgation before admission to hospital get through the disease with little or no tympanites."

Finney,[3] of Baltimore, has collected fifty-two cases and found that perforation of the intestines occurs in from 1 to 2 per cent. of all typhoid-fever cases, and acts as a cause of death in between six and seven per cent. of fatal cases. The perforation occurs in the last two feet of the ileum in over 80 per cent. of all cases; in the large intestine in about 12 per cent.; in the vermiform appendix ir about 5 per cent. of all cases. There seems to be no definite relation between perforation and the severity of the attack and takes place in the mild as well as in the severe cases, while the symptoms marking its onset may be sudden and severe or very mild or be entirely wanting. It commonly occurs between the ages of twenty and thirty and in the third week of the disease. Over 83 per cent. of all cases die during the first week.

Diagnosis of Perforation. — Finney[3] places most dependence upon sudden acute pain in the abdomen with symptoms of collapse, accompanied by an abrupt fall in the temperature. Vomiting is often present. Other symptoms, such as obliteration of liver dullness, gurgling sound on respiration, hiccough, etc., are useful when present. There is as yet no sign pathognomonic of perforation. The examination of the blood, however, promises to be of distinct diagnostic aid in this record. During the course of typhoid fever the number of white corpuscles gradually sinks, reaching its lowest point in about the end of the febrile period; with the development of the inflammatory complication there is a marked increase in the number of leucocytes, and one which takes place under no other known conditions.

Surgical Treatment. — Monod and Vanverts[4] argue that although the results of surgical intervention in cases of diffused peritonitis consequent on in-

[1] Brit. Med. Jour., Oct. 23, '97.
[2] Phila. Med. Jour., Jan. 1, '98.
[3] Johns Hopkins Hosp. Bull., No. 74, '97.
[4] Rev. de Chir., Mar., '97.

testinal perforations of typhoid fever are not very encouraging, this lesion, if left to itself, is almost certainly fatal (95 per cent. of fatal cases), and it is justifiable to resort to an intervention the general results of which (88 per cent. of mortality) are better than those of expectation. The prospects of operative treatment are less unfavorable when the perforation has occurred at a late stage of typhoid fever, and particularly during the convalescence or at the end of a relapse. The surgeon, however, may act at any period of the fever at which the perforation is produced, provided there is no distinct contra-indication presented by the general condition of the patient; the operation should be performed with the least possible delay, a condition of success which may be taken advantage of, as an immediate diagnosis of perforation is possible in most cases.

The necessity for prompt surgical interference in typhoid perforation, also in typhoid fever complicated by appendicitis, was reviewed by John B. Deaver,[1] of Philadelphia. Perforation plays an important role in the mortality of typhoid fever, although a few cases undoubtedly recover without operation. The author states his experience has shown that by early recognition of perforation and by prompt surgical interference the mortality of typhoid fever may be to a considerable degree lessened.

Perforation is most common at the end of the second or during the third week, although in one of Osler's cases it occurred as early as the eighth day, and in another during the sixth week, two weeks after the evening temperature had become normal (Osler). Perforation may be associated with hæmorrhage; but it is not the rule.

The location of the perforation usually in the terminal twelve inches of the ileum and occasionally in the colon. The onset is sudden; there are vomiting and severe abdominal pain, immediately followed by pronounced general rigidity of the belly-walls and general abdominal tenderness, followed by abdominal distension. Rigidity of the abdominal walls is, in the author's opinion, a most important and significant sign. There may also be collapse, as evidenced by a sudden fall in the temperature even to the subnormal, rapid and small pulse, and pinched countenance. Deaver regards the occurrence of sudden, acute abdominal pain, with very decided general abdominal rigidity and tenderness, with or without collapse, as the strongest possible indication for immediate abdominal section. To wait after the advent of these symptoms for further corroborative evidence of perforation he considers is fatal, septic peritonitis with an abdomen filled with pus being sure to follow and ending in death.

Appendicitis occurring as a complication of typhoid fever is not common. It produces symptoms not unlike those seen in the disease when it is present as an independent affection. Usually a history of previous attack or attacks can be elicited. The sudden onset of pain referred to the epigastrium or umbilical region, nausea followed by vomiting, which ceases, as a rule, when the pain becomes localized in the right iliac fossa, the circumscribed tenderness which corresponds to the site of the appendix, and the circumscribed rigidity of the immediately overlying belly-walls will in the greater number of cases suffice to warrant the diagnosis of appendicitis. When appendicitis occurs in connection

[1] Amer. Jour. Med. Sciences, Feb., '98.

with typhoid fever the diagnosis cannot always be clear, because of the likelihood of perforation in the latter affection. Experience also teaches that typhoid fever is the cause of chronic appendicitis in a small percentage of cases. Prompt operation advised.

The best time for operation, according to Finney,[1] is apparently as soon as possible after the patient has recovered from the shock attending perforation. This is usually in a few hours. There is a remarkable uniformity in the condition of the peritoneum and viscera; intense congestion, much feculent pus and exudate, with distension of the bowel. As the ileum is the usual place of perforation, it should be examined first; a suture should be taken over any suspicious-looking patches, and the appendix should be removed if it be at all abnormal. If the inflammation does not involve the whole peritoneal surface, irrigation with the necessarily mild fluids might tend to spread the infection. In dealing with the perforation, to excise the edges takes too long, and healing usually takes place without. Should the wall be in such a condition as to make suture impossible, it would be better to pull out the loop of intestine and leave it until the patient has recovered from his fever. The line of suture must be determined by circumstances; the mattress-suture is to be preferred. Drainage should always be employed.

Including all the cases that have been reported as operations for perforating typhoid ulcer, together with the six cases which he has collected himself, Finney states that the percentage of recovery is 32.68; including, however, all doubtful cases 45 are left, of which 11 recovered, —a percentage of 26.22.

[1] Johns Hopkins Hosp. Bull., No. 74, '97.

Editorial.

CHLOROFORM *VERSUS* ETHER.

Although ether is still preferred by the vast majority of American operators, the reported occurrence of grave disorders of the respiratory organs following its use have caused a few surgeons to resort to chloroform: a step which, it must be said, is not warranted by the facts of the case.

So competent an anæsthetist as our Associate Editor, Dr. Dudley Buxton, of London, has shown, after a careful study of the question, that, of the so-called cases of bronchitis and pneumonia following ether, but few are really due to that agent. In many cases, removal of the patient to a cold ward after he has been in a hot operating-theatre and subjected to severe surgical shock has been the true cause of lung trouble. In other cases pre-existing pulmonary lesions have been demonstrated. In others again, considerable cooling of the body has taken place, due to wet towels soaked in antiseptics freely laid over the chest-walls, or to the antiseptic spray, douche, packing, etc., employed. Bronchial catarrh, pneumonia, and pleurisy with effusion do follow operations: usually prolonged ones under

anæsthetics; but these diseases occur as well under chloroform as under ether, especially where proper precautions are not taken to prevent undue loss of heat from the patient's surface. Such precautions are especially important when we consider a feature of ether anæsthesia emphasized by H. C. Wood and W. S. Carter,[1] namely: that the circulation recovers itself more slowly after profound etherization than after a like chloroform narcosis. Indeed, it is possible for ether as well as chloroform to produce death some hours after the cessation of its administration, at a time when the cerebrum has long freed itself from distinct evidences of the narcotic, so that consciousness and intellectual action have been restored.

To abandon ether is evidently not the wise course when an anæsthetic presenting greater danger is to be employed instead. It would seem evident, from the foregoing remarks, that the avoidance, during the administration of ether, of anything involving loss of heat, such as the unnecessary application of moisture to any part of the cutaneous surface, undue exposure of parts entering in no way within the field of operation, etc., and care to keep the patient warm during the period of depression following ether administration, would go far toward the prevention of the pulmonary disorders that are charged to the anæsthetic, but which, in truth, should be ascribed to undue care on the part of the anæsthetizer. Were these features in the management of cases observed, the statement made by Gurlt, that deaths from the complications following the use of ether bring the mortality of this anæsthetic up to that of chloroform, would doubtless not hold good.

Cyclopædia of Current Literature.

ABORTION.

Case of septicæmia superinduced by abortion treated primarily by curettment without appreciable improvement, but which rapidly convalesced after one injection of 10 cubic centimetres of antistreptococcic serum.

A natural query is how far the serum was responsible for the cure, and whether the good result might not be the result of coincidence. Munro Campbell (British Medical Journal, Jan. 29, '98).

CARDIAC DYSPNŒA.

Etiology.—Cardiac dyspnœa is largely due to insufficiency of the right heart, usually following valvular lesions of the left heart. Under these conditions, the pulmonary respiration, which is of great value in assisting the forward movement of the blood, loses its efficiency, through various causes, partly because a sufficient quantity of blood cannot remain in the right ventricle. Congestion of the lungs is not essentially a feature of the condition, as attacks of severe orthopnœa are frequently observed quite unassociated with any congestion or œdema, properly so-called; neither can imperfect aëration of the blood be an important factor. The main factor of causation doubtless is imperfect action of the heart; that

[1] Journal of Experimental Medicine, May, '97.

is to say, it arises from the reflex transmitted from the stimulated cardiac nerves to the accelerator fibres of the pneumogastrics. Cheyne-Stokes respiration is also a symptom of nerves origin, being due to the exhaustion of the patient and the blunting of the cardio-respiratory reflex. A. Morrison (Treatment, Jan. 13, '98).

CEREBELLUM, ABSENCE OF ONE-HALF OF.

Post-mortem.—A man of 46 had suffered for some years from obstinate constipation. When he first came under observation there was, in addition, a tendency to attacks of unconsciousness, a weak heart, with bradycardia and symptoms of neurasthenia, but none of cerebellar or other organic disease of the nervous system. The attacks of unconsciousness became more and more frequent, and during them it was noticed that there was some turning of the head to the left, and left conjugate deviation. The heart presented very curious phenomena. During the intervals between the attacks the pulse varied between 12 and 16 beats per minute; then it would become less frequent and finally stop entirely. The attack would commence and the pulse would gradually reappear, increasing until, with return of consciousness, it was once more 12 or 16 beats. This condition is believed to be identical with that caused by irritation of the vagus in dogs. At the autopsy the thoracic and abdominal organs were found entirely normal. The myocardium in particular was perfectly healthy. The brain showed the following changes: The right hemisphere of the cerebellum was almost entirely absent;. the left was normal. Both cerebral hemispheres were apparently normal. More careful investigation showed a small body, about the size of a hazel-nut, that represented the absent hemisphere. The remainder of the posterior fossa of the skull was filled by a sac containing clear fluid. The right half of the vermiform process of the cerebellum shared in the hypoplasia; the right olive was absent; the right side of the pons, the right corpus geniculatum, and the right crus were all smaller than the corresponding portions on the left. Sections showed an absence of the corpus dentatum. The right vagus and acusticus nuclei were altered. The restiform body was very much diminished in size. The superficial fibres in the pons were almost entirely absent on the right side, proving their connection with the cerebellum. T. H. Neubürger and L. Edinger (Berliner klinische Wochenschrift, Jan. 24, '98).

CHOLERA.

Prophylaxis.—The number of micro-organisms in well-water may be materially reduced for several days by placing potassium permanganate in the well. This fact led me to attempt to check choleraic outbreaks in India by putting the permanganate salt in the wells of villages in which the outbreaks occurred. Enough was used to give the water a pink color until the following day, generally two or three ounces, and the procedure repeated every third or fourth day. As a result, the cholera outbreaks were of shorter duration, and cases fewer in these villages than in those using water from wells that had not been treated. E. H. Hankin (British Medical Journal, Jan. 22, '98).

CYSTITIS.

Etiology.—According to the literature of more recent years, the bacterium coli is one of the most common germs found in cystitis. It may enter the bladder by

passing through the urethra, or from the neighborhood through the vesical wall; but it may also enter the blood-vessels and pass out again through the kidneys when the latter are in a morbid state. Thus this bacterium may be a cause of cystitis when predisposing conditions exist. Of 37 cases of cystitis examined, the colon bacillus was found in 13 (12 times solitary); diplococcus ureæ liquefaciens 11 times (9 times solitary); proteus hauser 5 times (3 times solitary), and staphylococcus pyogenes 4 times (3 times solitary). M. Melchior (Ugeskrift for Lager, '97).

DISPLACED AND ADHERENT PREGNANT UTERUS.

Treatment. — The patient, seven months pregnant had a retrodisplaced and adherent uterus for which abdominal section was performed. The consistence of the fundus was about that of a dermoid cyst; the cervix was well up above the symphysis and out of reach. After loosening the fundus the cervix was pushed down and dilated, and the child extracted by the feet. Severe ether bronchitis complicated convalescence, but eventually a good recovery was made. K. Franz (Münchener medicinische Wochenschrift, Jan. 4, '98).

ERYTHEMA CAUSED BY PRIMULA ACAULIS.

Symptoms.—Several obscure cases of erythema in women presented. It began with tickling and pain in the skin; the hands were red on the dorsal surface and between the fingers. In severe cases the skin was considerably swollen and bullæ appeared. On the palpebra the erythema was quite erysipelatous, and ptosis often observed; a lamellous desquamation followed usually.

Etiology.—The cause of the disease was found to be the *Primula acaulis* (common primrose), to which these women appeared very sensitive; but a gardner who kept several specimens and varieties never suffered therefrom. In all the cases of erythema the primroses were kept in the rooms, and after removal of the plants the eruption disappeared. Actandor (Hospitalstidende, '97).

EXTRAPERITONEAL RUPTURE OF BLADDER.

Treatment.—The case was complicated by fracture of the pubis. The rent in the bladder wall was sutured, and the supravesical space drained through the median incision, and through incision in each inguinal region. The day following the operation the patient was placed in a bath at a temperature of 100° F., and was kept there almost continuous for a period of forty days. The immediate effects of the bath were most pronounced, the condition of the patient, which was serious and attributed to the absorption following urinary extravasation, promptly improved. The ultimate result was most satisfactory, the fragments of the pubis thoroughly uniting and the suprapubic wound entirely closing. He eventually walked without any evidence of disability. This is the third case in which the continuous bath was employed in an injury of this nature, and all evidence that this measure is a prime factor in promoting better drainage, while it at the same time prevents undue absorption. J. F. Mitchell (Johns Hopkins Bulletin, Jan., '98).

EXTRA-UTERINE PREGNANCY.

Diagnosis.—Superficial dullness on percussion over the pubes and in either flank, which on deeper percussion is replaced by a resonant note; a thrill in the

same regions on gently flicking with the finger-nail, though no ordinary sign of fluctuation can be felt; on turning the patient over the dullness in the flank then uppermost persists for some time, but gradually disappears in a way that is never observed in the case of any other fluid than blood in the peritoneal cavity. Mayo Robinson (British Medical Journal, Jan. 29, '98).

FRACTURE BETWEEN BASE OF CRANIUM AND BONES OF FACE.

A man, 35 years of age, while intoxicated, fell from a cart loaded with 6000 bricks, and a wheel passed over his head. No coma, no vomiting, moderate bleeding from mouth and nose, but none from ears; no cerebral symptoms that were not due to alcoholism—an attack of delirium tremens immediately followed, from which he recovered. Could not masticate food, as it was impossible to separate the jaws more than one centimetre. Face asymmetrical; the lower maxilla normal; greatly contused about the zygomæ. Mobility forwards and backwards of all the parts below the frontal bone. The fractures were between the base of the cranium and the bones of the face, situated on a line from the root of the nose to the superior lateral course of the orbital margin on both sides, and to the middle of the zygomatic arch. Slomann (Hospitalstidende, '96).

FRACTURE.

Treatment.—The plaster of Paris splint or bandage is unscientific, clumsy, and inefficacious. Fixation is best secured by a splint that can be molded directly upon the parts, that can readily be removed and as readily reapplied and readjusted, and, finally, is permeable by the X-ray. Wood fibre is a material that possesses all the qualifications, and when properly applied fulfills all the requirements. E. A. Tracy (Boston Medical and Surgical Journal, Feb. 3, '98).

HÆMOPTYSIS.

In hæmorrhages of this character quiet is of first importance, and this cannot be secured simply through enforced inactivity. What is needed is a calm that will diffuse itself with sure celerity through the nerve-centres and plexuses and restore the co-ordinations that have been lost through the element of fear. This rest is available through the hypodermic use of a decisive dose of atropine, and until this tranquility is secured, all treatment will be experimental. It quiets the tumultuous demeanor of the central organ—the heart—and restores its wonted rhythm. The unstable behavior of the peripheral vessels in the general circulation, as also in the pulmonary area, is replaced by a placidity that is at once restful and restorative. It quickly and surely puts to rest the emotional elements that otherwise might continue indefinitely.

Moreover, the fact that atropine is rapidly diffused and quickly eliminated, adds to its value in these cases. It becomes the duty of the physician to adjust the treatment to the element of fear as well as to the hæmorrhage. If the latter is abundant, the dosage should be large enough to paralyze the peripheral vasomotor nerves, and thereby lessen blood-pressure, causing a general determination of blood to the surface, and thus relieving the vessels from which dangerous hæmorrhages emanate. If the hæmorrhage be small, and the emotional manifestations, as exemplified through the element of fear, be great, the dosage should be proportionate to

the fear-element, and, therefore, must be generous. The dosage that will usually be well borne will be from $^1/_{100}$ to $^1/_{25}$ grain, repeated after a lapse of four to six hours. English (Pennsylvania Medical Journal, Dec. 5, '97).

HEART-WOUNDS.

Wounds of the heart are almost always rapidly fatal, but two instances were recorded during the past year in which life has been saved. In the first, a man who was under the care of Parozzani, of Rome, was stabbed in the left side, and five hours later he was brought to the hospital extremely pallid and with a heart-beat barely perceptible. An operation was performed at once. A flap was marked out comprising the whole thickness of the thoracic wall and containing portions of the fifth, sixth, seventh, and eighth ribs; this was turned inward and the left pleural cavity was found to be filled with blood, and an opening an inch in length was seen in the pericardium—the stab had also penetrated the left ventricle and a finger was passed into the cavity; blood was flowing at each heart-beat from the wounded ventricle. The wound was closed with four stitches, and then the pericardial wound was sutured and the skin incision also. The patient recovered completely. The second case was under the care of Prior, of Woodilee Asylum, Lenzie, Glasgow. A man, aged 43 years, had tried to kill himself previously, and his second attempt was made by pushing an iron pin through the chest-wall a little below and internal to the left nipple; the portion of the pin within the chest measured three inches and the part outside moved up and down every time the heart beat. The pin was withdrawn and no ill effects followed, the wound healing by first intention. Lewis (Medical Review of Reviews, Jan. 25, '98).

KYPHOSIS (JUVENILE).

Etiology.—Local morbid conditions often are the cause of abnormal position of the vertebral column. In the superior vertebræ are often found anomalies induced by rheumatic disease of muscles; and the most common anomaly consists in the cervical vertebræ being curved with their concavity backward, and the head also bending backwards, the chin then being protruded. Lateral curves or rotation of the column are often observed. The face can be asymmetrical; the shoulders depressed and carried forwards. In such cases rheumatic attacks were observed in the cervical and occipital muscles, and a careful examination revealed in all cases rheumatic deposits in these muscles, most commonly in the trapezius and splenius.

Treatment.—This consists chiefly of methodical exercises and massage. Lorenzin (Ugeskrift for Lager, '96).

LARYNX, CARCINOMA OF.

Diagnosis.—A prime necessity is an early diagnosis, and the presence of a unilateral growth in a person beyond middle age, associated with hoarseness or slight huskiness, is ground for suspicion; but suspicion must be confirmed by microscopical examination of the diseased tissue.

Treatment. Conservative methods often afford satisfactory results. Laryngectomy is unnecessary in all cases, and should not be resorted to unless absolutely imperative, for it is followed by a higher mortality and destroys the lumen of the respiratory canal. J. P. Clark and F. B. Harring-

ton (Boston Medical and Surgical Journal, Feb. 3, '98).

NEPHROPTOSIS (MOVABLE KIDNEY).

Treatment.—Mechano-therapy will afford equally as good results as operative procedures if carefully applied. Five cases treated by application of abdominal pad and belt, massage, and exercises, with relief of all the symptoms. In 16 cases, where the rest cure simply was employed, 8 were more or less permanently improved, 7 unimproved, and 1 disappeared. The permanence of absence of symptoms depends chiefly upon the extent to which the body-weight is maintained. Symons Eccles (Lancet, Jan. 9, '98).

NIGHT-SWEATS OF PHTHISIS.

Treatment.—This is readily controlled by giving a hypodermic injection of $^1/_{80}$ grain of atropine sulphate at bed-time. It is not even necessary to give it every night, for after three or four nights it may be suspended, and, in all probability, it will not be necessary to revert to it for a week or more. This is the best treatment for this distressing symptom, with, perhaps, the exception of picrotoxine, in doses of $^1/_{60}$ grain at bed-time, which rarely fails. William Murrell, London (Medical Brief, Jan. '98).

OPERATIVE PERITONITIS.

Treatment.—I completely disapprove of large dressings after cœliotomy, on the ground that one is unable to keep under constant observation the condition of the wound. All that is needed is to simply cover the wound with an antiseptic paste, which offers ample protection. With the first evidences of peritonitis, if there are no evidences of speedy abatement under ordinary measures, the abdominal wound should be opened throughout its entire length and permitted to remain so. Strips of sterilized gauze are now inserted, and enough placed over the wound to entirely cover it. This method, in my hands, has been attended with marked sucess, not only following cœliotomies, but in puerperal cases. By opening the wound throughout, intra-abdominal pressure is decreased, peristalic movements limited, and free drainage provided. H. von Erlach (Wiener Klinische Wochenschrift, Jan. 20. '98).

PUERPERAL SEPTICÆMIA.

Treatment.—The strength must be supported by food and stimulants, meat-juices, meat-extracts, and whisky or other liquor of good quality in the form of eggnog. Marmorek's antistreptococcic serum may be tried in suitable cases in doses of from 5 to 40 cubic centimetres. Treatment with nuclein is less promising. Hypodermoclysis of normal salt solution is probably effective in eliminating ptomaines by rapid excretion through the kidneys. King (National Medical Review, Jan., '98).

RHEUMATOID ARTHRITIS.

Treatment.—Inasmuch as I hold this malady to be of bacterial origin, I employ such drugs as exhibit powers of elimination. So far, I have found creosotal, benzosal and guaiacol-carbonate most useful, the latter being the most agreeable of the group. Give guaiacol-carbonate in doses of from 5 to 15 grains, beginning with the smaller and rapidly increasing. These doubtless act by combining with the bacterial toxins to be eliminated as guaiacol-sul-

phate. Externally also apply guaiacol dissolved in olive oil. This method often induces even in severe cases. rapid subsidence of symptoms with relief of pain and ultimate restoration to health. G. A. Bannatyne (Edinburgh Medical Journal, Jan., '98).

SYPHILIS.

Treatment (abortive).—This consists either in excision of the induration or the common treatment applied as early and as energetically as possible. The first method was employed in thirteen cases with no effect in twelve. The successful case was that of an ulceration of the prepuce presented to me a month after the last act of cohabitation. A month subsequent to this visit to me there was no doubt as to the syphilitic infection, and excision was performed. Signs of constitutional syphilis never presented, until some years after, and then undoubtedly as the result of new infection. Pontoppidan (Ugeskrift for Lager, '97).

TORTICOLLIS.

Treatment.—This distressing condition may often be alleviated by the administration of conium in large doses, —60 drops of the fluid extract in the course of twenty-four hours,—and hypodermics of atropine. The galvanic current applied to the side of the neck oftentimes gives relief, particularly if there is much pain. Massage is also of service. J. Collins (Medical Record, Feb. 12, '98).

TOXÆMIA.

Treatment.—Theoretically and practically, the principles of osmosis offer the best results, being founded on the fact that toxins are dialyzable; the antitoxins not being so, remain in the circulation undisturbed. The procedure is a simple one: The blood is diluted by intravenous injections of a decinormal salt solution and the rectum filled with a saturated solution of magnesium sulphate; thus are furnished the conditions necessary for dialysis,—viz., two fluids of different degrees of concentration on either side of an animal membrane (the rectal wall). I treated two cases on this principle; one of purulent peritonitis, the other of puerperal septicæmia. In both a pronounced chill with hyperpyrexia, followed by a sudden drop of the temperature to normal, with marked amelioration of the general condition, was the immediate sequence of each injection. This treatment should be available in all conditions due to the presence of a poison circulating in the blood, which is capable of being dialyzed. W. McKeown (Canadian Practitioner, Jan., '98).

UTERINE FIBROID.

Treatment.—The legitimate surgical procedures that may be utilized are: Curettage; division of the uterine arteries; myomectomy, both vaginal and abdominal, and hysterectomy. Myomectomy is the preferable operation in all cases in which it is possible and does not involve too great risks; and it is applicable to three-fourths of the cases in which hysterectomy is performed. A. H. Goelet (American Journal of Obstetics, Jan. 18, '98).

UTERINE DISEASE.

Etiology.—Deficient excretion from the kidneys, though these may not be organically diseased, is responsible for the production and continuation of many uterine disorders. By insisting upon a diuretic treatment of some skin affections marked improvement of asso-

ciated pelvic disorders were noticed. L. D. Bulkley (Journal of the American Medical Association, Jan. 8, '98).

Treatment.—Mechanical intra-uterine treatment is indicated in chlorotic girls with hypoplasia of the internal genitalia and tapiroid cervix with amenorrhœa or dysmenorrhœa and nervous pains. The most satisfactory measures are electricity either to the uterine neck or by means of the intra-uterine pessary and sounds. E. M. Simons (Deutsche medicinische Wochenschrift, Dec. 23, '97).

WOUNDS.

Sequelæ.—Death of fœtus *in utero* from gunshot wound; recovery of the mother. Bullet wound, made by a fair-sized ball, a little to the right of the umbilicus and slightly below. Labor set in, and went on slowly until, the woman being fairly exhausted and the pains weak, the os being sufficiently dilated, she was delivered by long forceps. Post-partum hæmorrhage was very sharp. The hand was next passed into the uterus; an opening in the anterior wall could be distinctly felt, with a part of the membranes prolapsed and held tight in the same. No attempt was made to loosen this, but the membranes were torn off close to the uterine walls, and the hand withdrawn with placenta, which was loose in the cavity. The uterus was washed out with a hot, antiseptic solution (creolin) and ergot was given. The child was at almost full term; the ball had entered the right shoulder by the junction of the acromion process with the scapula, and had come out in the left iliac region. The ball found in the *débris*. Samuel W. Robinson (Lancet, Oct. 23, '97).

Treatment.—Case of complete section of the ureter some inches above the bladder. A slit was made in the lower portion of the organ; the upper portion was then invaginated in the slit by means of two traction-sutures. The incision was then sutured and a few additional sutures introduced around the circumference of the free end. Uneventful recovery. R. Winslow (Annals of Surgery, Jan., '98).

Book Reviews.

Reference-book of Practical Therapeutics, by Various Authors. Edited by Frank P. Foster, M.D., Editor of the New York Medical Journal and of Foster's Encyclopædic Medical Dictionary. Two volumes, Royal Octavo. New York: D. Appleton & Company, 1897.

This work of nearly 1300 pages has been prepared especially for the general practitioner of medicine. It is not intended as an exhaustive treatise on materia medica or on pharmacy, and does not pretend to take the place of such. The practical use of drugs and the management of poisoning due to them allows the editor and his staff of thirty-five distinguished contributors to condense much that is interesting rather than essential to the general practitioner, and omit more that properly belongs to a treatise, thus serving up to its readers the "baked meats" and leaving out the "dry bones."

In subject-matter the work is "up to date." In addition to the articles on drugs proper, we notice many excellent ones on general subjects: "Climatic, Dietetic, and Electrical Treatment"; "Baths," "Hydrotherapeutics," "Mineral Springs and Waters," "Thallasotherapy," "Massage," "Exercise," "Rest-cure,"

"Animal Extracts," "Serum-therapy," "Transfusion and Infusion," and "Hypnotism." The articles on "Milk and Milk Adulteration" are especially good. The x-rays are given due consideration.

The usefulness of a reference-book depends on the fullness of its index. In this work we have 86 pages of general index, 69 pages of Index to Diseases and Remedies, and in addition an index of Authors. In our opinion, this work is a valuable addition to any medical library; it should be in the hands of all who wish to keep in touch with therapeutic progress. C. S. W.

New Books Received.

The editor begs to acknowledge, with thanks, the receipt of the following books:—

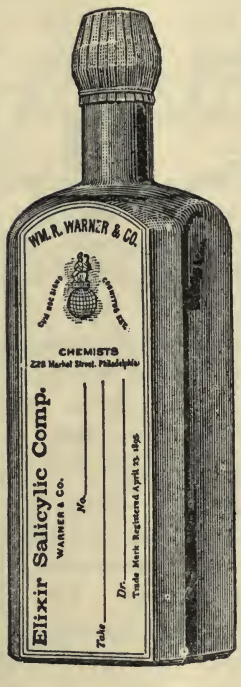
Transactions of the Congress of American Physicians and Surgeons, 1897. ——Elements of Latin, for Students of Medicine and Pharmacy. By Crothers and Bice. The F. A. Davis Company, 1898.——Outlines of Rural Hygiene. By Harvey B. Bashore, M.D. The F. A. Davis Company, 1897.——A Modern Pathological and Therapeutical Study of Rheumatism, Gout, Rheumatoid Arthritis, and Allied Affections. By E. L. Gros, M.D., 1897.——Agenda Therapeutics. By Dr. Heinrich Paschkis, 1898.

Monographs Received.

The editor desires to acknowledge, with thanks, the receipt of the following monographs, etc.:—

The Use of Electrolysis and the Galvano-cautery in the Treatment of Diseases of the Nose and Throat. By Philipp Fischelis, M.D., Philadelphia, 1897.—— Notes on Household Disinfection by Formaldehyde. By Wyatt Johnston, Quebec, 1897.——On the Hæmatozoan Infections of Birds. By W. G. MacCallum, M.D., Baltimore, 1897.——Examination of the Urine as a Means of Diagnosis. By T. W. Schaefer, M.D., Kansas City, Mo., 1897.——Some Remarks Upon the Uric-acid Diathesis and Its Treatment. By C. F. Craig, Danbury, Conn., 1897.——A Note on Two New Creosote Compounds: Creosote Valerianate and Guaiacol Valerianate. By Frank Woodbury, M.D., Philadelphia, 1897.——Difficulties of Determining the Causes of Coma. By J. T. Eskridge, M.D., Denver, Col., 1897.——Successful Removal of an Enormous Mesenteric Tumor and nearly Eight Feet of Intestine. By F. J. Shepherd, M.D., C.M., Montreal, 1897.——Primary Lupus of the Larynx. By Emil Mayer, M.D., New York City, 1898.——The President's Address, Delivered Before the American Laryngological Association at its Nineteenth Annual Congress. By Charles H. Knight, M.D., 1897.——Exostosis of the Septum as a Cause of Chronic Naso-pharyngitis. By C. H. Knight, M.D., New York, 1897. ——The Prevention of Infectious Diseases. By J. M. G. Carter, M.D., Waukegan, Ills., 1896.——Poultices in Pulmonary Diseases of Children. By J. M. G. Carter, M.D., 1897.——Alcoholism as a Disease. By G. H. McMichael, M.D., Buffalo, 1897.——Surgical Mélange. By Merrill Ricketts, Ph.B., M.D., Cincinnati.——Abdominal Incision for Ascites. By B. Merrill Ricketts, Ph.B., M.D., Cincinnati, 1897.——Craniectomies—With Report of Four Cases. By Merrill Ricketts, Ph.B., M.D., Cincinnati, 1897.

[End of the Editorial Department of the Monthly Cyclopædia for February, 1898.]



AN ETHICAL Reliable remedy in Rheumatism, Gout, Lumbago, and analogous diseases.

ELIXIR SALICYLIC COMPOUND (WM. R. WARNER & Co.)

Formula:
Acid Salicylic. Potass. Iodide
Cimicifuga. Soda Bicarb.
Tr. Gelsemium.

A prompt effective remedy in the treatment of the above diseases. Very palatable.

DOSE—Tablespoonful every 3 or 4 hours till four doses are taken. Gradually decrease to teaspoonful every three or four hours. In Inflammatory Rheumatism, the dose is two teaspoonfuls every four hours till it produces tinnitus aurium, after which above directions are to be followed.

12 oz. square blue bottles, $1.00

See that original is dispensed on your prescription.

FOR SALE BY ALL DRUGGISTS.

WILLIAM R. WARNER & CO.

1228 Market St. Philadelphia. *52 Maiden Lane, New York.* *197 Randolph St. Chicago.*

NOTES AND COMMENTS.

A Phase in the Treatment of Goutiness.

—In a clinical paper contributed to the Medical News Dr. Reynold W. Wilcox, of New York, says:—

"The purpose of this paper is to point out that a very considerable number of so-called neurasthenics are really patients who are suffering from goutiness of the particular variety known as neurotic lithæmia. It is a notorious fact that these patients are cured with difficulty, notwithstanding that they are curable. The clearing of the mental atmosphere of depression as soon as the stored uric acid is set in motion toward excretion is remarkable. Further, since it is not the excess of manufactured uric acid, but rather its deficiency of elimination, to which the symptoms are due, and, in addition, that a vegetable diet contains albumin of a variety which is difficult of oxidation, renders the prohibition of red meats an illogical procedure. Piperazine *in vitro* has been proved to be an efficient and harmless solvent for uric acid.

"So far as my knowledge goes, piperazine-water is the method of choice for the administration of this drug, because perfect solution in proper dose and quantity of menstruum is obtained.

"It may then be concluded: 1. That uric acid, as a causative factor in neurotic lithæmia, a form of goutiness, should not be overlooked. 2. That a limited meat diet is productive of good results. 3. That piperazine, administered in the form described in this paper, is the remedy of choice for the elimination of uric acid, not only in this, but

Notes and Comments (continued).

in other pathological conditions dependent upon the same cause."

Do You Want a Good Farm for Very Little Money?—We can put you in the way of getting fine farm-lands in South Dakota for $10 per acre and upward, one-third cash, remainder on easy terms. Send for descriptive list of lands and for free, illustrated pamphlet on South Dakota, containing numerous letters from farmers in the finest agricultural and stock-growing western State.

Address: George H. Heafford, General Passenger Agent, Chicago, Milwaukee & St. Paul Railway, Old Colony Building, Chicago, Ill., or H. F. Hunter, Immigration Agent, 291 Dearborn St., Chicago, Ill.

Wisconsin Farm-lands.—There is a rush now to the choice unoccupied farm-lands along the line of the Chicago, Milwaukee & St. Paul Railway in central Wisconsin.

Good quarter-sections can now be had for $7.00 and upward per acre, one-third cash, remainder on long time at current rate of interest.

For further particulars address W. E. Powell, General Immigration Agent, 410 Old Colony Building, Chicago, Ill.

Denver.—It will roll around before we know it,—the next meeting of the American Medical Association; and this time the beautiful city of Denver is to have the honor of entertaining members of the association. Many of us wonder if a more enjoyable and instructive time could be had than at the last meeting in Philadelphia, where each member left feeling he had seen more, heard more of interest, and was feted more than at any preceding meeting of the American Medical Association.

One naturally thinks the members of the several committees will have their hands full in this coming event to equal the last meeting, but Denver has much to offer, and the world moves fast now a days. After the meeting is over we would not be surprised to hear that it surpassed the Philadelphia meeting. Many plans are being made for the entertainment of the guests, and some of us who have visited Denver and surrounding country understand how well the people there can accomplish all that they promise in advance. The cleanliness of the city is quite marked, its pure, dry, exhilarating air will benefit the most robust of us as well as the afflicted. The subtle charm of the mountain-ranges seen from the city are indescribable: words fail to convey any adequate sense of this beauty of scenery, the vivid contrast of light and shadow, the green foot-hills and snowy heights of mountains make a most glorious landscape. Such panoramas of mountain-scenery are worth much to those not often privileged to enjoy such a region.

The trips to be taken outside of Denver will give one a good idea of the surrounding country, the marvelous beauties in the scenery of the State, and its wonderful possibilities for the future. Physicians can accomplish two things in this trip, for, besides the personal benefit and pleasure derived, they can investigate the climatic conditions and judge for themselves as to the inducements the

When in Detroit, Mich., stop at Franklin House, Bates and Larned. $1.50 to $2.

In writing to advertisers mention this Journal

Lysol

A Safe and Powerful Disinfectant and Antiseptic.

Practically Non-Poisonous. Dissolves Clearly in Water. Used in 2% Solutions. Superior in Germicidal Power to Carbolic Acid.

E. BOECKMANN, M. D., in the Section of Surgery and Anatomy, at the 47th Annual Meeting of the American Medical Association, stated:

"Supported by further experience I can this year more strongly than last recommend the 1 to 2 per cent. solutions of LYSOL at 120° F. for combined mechanical and chemical disinfection of the operator's hands and the patient's skin.

LYSOL possesses the undeniable advantage of being at the same time antiseptic and aseptic; it is a happy combination of a powerful disinfectant and soap (saponified cresol). I know of no agent which at the present time is better adapted and more reliable in the disinfection of the skin than LYSOL."

Manufactured by SCHUELKE & MAYR, Hamburg, Germany.

LEHN & FINK, Licensees and Sole Agents, NEW YORK.

Lactopeptine

contains all known substances employed by nature in the digestion of all kinds of food.

The N.Y. Pharmacal Association
Yonkers, N.Y.

Notes and Comments (continued).

State has to offer for those suffering from pulmonary difficulties; can observe how sleeplessness and similar maladies are speedily relieved, and the exhilarating and stimulating influence of the climate upon even the most inert and most unambitious patients. Investigation may also be made of the mineral waters of Colorado, and the outside trips will bring to light what has been pronounced by eminent authorities as springs inferior to none in the world. For a long time a large body of patriotic American physicians have been propounding the question: "Why send patients to Carlsbad, Baden-Baden, etc., when our own country has their equal if not their superiors?"

The entire absence of excessive humidity and fog so often claimed has aroused the interest of the entire profession to this region as apparently fully equal to anything across the Atlantic for those suffering from tubercular troubles: bronchitis, asthma, etc. The next meeting will give them an unusual opportunity for personal observation.

Among the railroads that are making preparations for the event none are, perhaps, more favorably known than the luxurious and picturesque Sante Fe. We have found its literature and time-tables of much service in laying our plans to visit this land of "sunshine and blue skies," the well-named "backbone of the continent." Let us capture Denver on association week with the largest meeting ever held west of the Mississippi.

The Fatality of Cardiac Wounds.—Wounds of the heart not always immediately fatal. The cases in which patients suffering from small wounds of the heart have lived for some time, and have even recovered, are by no means rare. One man who had been stabbed over the third left costal cartilage, and had suffered severely from hæmorrhage, died seventy-nine days after the injury from general causes, and after death a scar was found in the right ventricle.

Muhlig relates the case of a man who was stabbed with a stiletto on the left side of the sternum. He recovered, and returned to his employment; and on his death from other causes ten years later, it was found that the pericardium was intimately adherent to the heart, and that there was a rounded opening on the inner surface of the right ventricle admitting the little finger, and a corresponding hole in the interventricular septum leading into the left ventricle.

General Gordon wrote in his journal at Khartoum: "One man received a wound in the chest; he lived eleven days and died. The doctor found a bullet lodged in the centre of the heart, in wall of ventricle."

The left ventricle of the Duc de Berri was pierced by a dagger, yet the Duke lived eight hours.

It is very important from a medico-legal point of view to remember that after even large wounds of the heart patients have been known to walk or run some considerable distance after the receipt of the injury.

Taylor relates a case of a sailor whose auricles and part of the aorta next the heart were shattered by the slugs and brass nails with which the piece was loaded yet the body was found 18 feet away from the spot where the shooting occurred.

But many very extraordinary instances of the persistence of life after injury to the heart are on record. For example, one of a man who lived for twenty days

An ideal ointment **Resinol** A perfect dressing

(℞: *Unguentum Resinol* ℨi)

Antipruritic Antiphlogistic Antiseptic Emollient Nutrient, Etc.

MEETS ALL INDICATIONS
FULFILLS ALL EXPECTATIONS

INSTANTLY STOPS THE ITCHING
QUICKLY SUBDUES THE INFLAMMATION
MAINTAINS A CONSTANT ASEPSIS
SOOTHES IRRITATION AND PAIN
AND SUPPLIES THE NEEDED NUTRITION

Unguentum Resinol should be readily obtained at any drug store, as it is carried in stock by wholesale druggists and jobbers in medicines everywhere.

RESINOL CHEMICAL COMPANY

SAMPLE SENT ON REQUEST BALTIMORE, MD., U. S. A.

WELCH'S GRAPE JUICE.

The Pure, Unfermented, Undiluted Juice of Concord Grapes. Pressed, Sterilized, and Hermetically Sealed in New Glass Bottles by the Cleanest Possible Methods.

"FRUIT NUTRITION IN FLUID FORM."

DR. JAS. C. JACKSON, of "Our Home Hygienic Institute," Dansville, N. Y., says: "I think Unfermented Grape Juice one of the best beverages for both sick persons and those who are in health. Wherever I want anything in the way of fruit nutrition in fluid form, I recommend it as by all degrees the best of anything I know. I am sure the medical men might use it in a large class of cases of disease to excellent advantage. Beside this it has merit as a nutritive fluid. Who drinks it is nutrified by it."

"GRAPE JUICE BY FAR THE BEST."

DR. W. H. BURT, of Chicago, in his book, "Consumption and Liquids," on page 96, says: "Unfermented Grape Juice is probably the most useful element (outside of milk) we have to commingle with water to form a beverage, * * * it not only contains water, but many of the elements that go to build up the solids of the body, * * * it is not only palatable, but very nourishing, and can be drunk longer than any substance I am acquainted with. The best preparation that I have found is that prepared by Dr. Welch, of Vineland."

SEND FOR OUR GRAPE CALENDAR, FREE, AND MENTION THIS JOURNAL.

A 3-oz. sample, by mail, 10 cents. Single pint, express paid, 42 cents in stamps.

WELCH GRAPE JUICE CO., Watkins, N. Y.

ESTABLISHED, VINELAND, N. J., 1869.

In writing to advertisers mention this Journal

Notes and Comments (continued).

with a skewer traversing the heart from side to side, and another of a boy who lived for five weeks with a piece of wood three inches long in his right ventricle.

A Handsome Metal Paper-cutter and Book-mark Combined sent free of postage under sealed cover on receipt of ten cents in silver or stamps. The latest, best, and most serviceable adjunct of every library and office. Address George H. Heafford, 410 Old Colony Building, Chicago, Ill.

The Treatment of Epidemic Influenza.—Dr. Aladar Békéss, of Vienna, writes in the Wiener medicinischer Presse:—

"I give in the beginning a laxative, preferably calomel, in doses of 2 to 5 grains for adults (one-tenth the amount for children). The calomel is divided into three powders, given at intervals of one hour. As long as the fever lasts, rest and a fever diet are indicated.

"Since 1890 I used almost exclusively salipyrin. I prescribe as an evening dose 15 grains (seldom 20 to 30 grains); mornings generally one-half that amount, although at times I do give 10 or 15 grains. For children one-tenth to one-half the above-mentioned doses according to age. With this remedy I have obtained the best results, which now and then were almost phenomenal in character. I noticed that salipyrin must be continued for some time in order to achieve a good result. I prescribe 10 grains at night for three to five days after the fever has disappeared."

Imperial Granum.—In whatever form milk is used imperial granum is an excellent coadjuvant. This combination of nutriments is palatable and well borne at all periods of life, being in many cases retained and assimilated when everything else is rejected, though in very extreme cases the imperial granum is often prepared with pure water only.

A Winter Remedy.—Codeine has an especial effect in nervous coughs, and controls excessive coughing in various lung and throat affections, on account of its special action on the pneumogastric nerve. Codeine does not arrest secretion in the respiratory and intestinal tract.

The coal-tar products have great power as analgesics and antipyretics. Antikamnia is now generally accepted as the safest and surest of the coal-tar products. Five-grain "antikamnia and codeine tablets," each containing 4 3/4

Platt's Chlorides,

The True Disinfectant.

An odorless, colorless liquid; powerful, safe, and cheap; indorsed by over 23,000 physicians; sold everywhere in quart bottles only. Prepared only by

HENRY B. PLATT,

Platt Street, New York.

In writing to advertisers mention this Journal

Notes and Comments (continued).

grains of antikamnia and 1/4 grain of sulphate of codeine, afford a desirable mode of exhibiting these two valuable drugs. The proportions are those most frequently indicated in the neuroses of the throat and coughs incident to lung affections.

Sleepers to West Baden and French Lick Springs. — The Monon Route has established a semiweekly sleeping-car service between Chicago and the famous health resorts: West Baden and French Lick Springs. Sleeper leaves Dearborn Station, Chicago, at 8.30 P.M. on each Saturday and Wednesday, and, returning, leaves the Springs on Thursdays and Sundays. Ticket-office, 232 Clark Street.

Florida and the Sunny South.—One of the most attractive and tasty little books of description that we have seen for many a day, has just been issued by the Passenger department of the Clyde Line, entitled: "To Florida and the Sunny South." It contains thirty-five

VACCINE PURE AND RELIABLE ANIMAL VACCINE LYMPH. Fresh Daily. Send for Illustrated Pamphlet. 10 IVORY POINTS, Double Charged, $1.00. 10 CAPILLARY TUBES, $1.00. Orders by Mail or Telegraph Promptly Dispatched. **VIRUS.**

NEW ENGLAND VACCINE CO., Chelsea Station, BOSTON, MASS.

WM. C. CUTLER, M D CHAS N. CUTLER, M.D.

PHYSICIANS! N. B.

Clyde Line Excursions

New York to

FLORIDA

and return

Including Meals and Accommodations.

$35.30

Intermediate Round Trip.

$43.30

FIRST-CLASS ROUND TRIP. $3.75 additional includes round trip on the

Beautiful St. John's River.

Full particulars and beautifully illustrated booklet in regard to "Florida and the South" mailed free upon application to Passenger Department.

W. H. HENDERSON, G. E. P. A. 5 Bowling Green, N. Y.

W. H. WARBURTON G. T. P. A. 5 Bowling Green, N. Y.

T. G. EGER, T. M., 5 Bowling Green, N. Y.

WM. P. CLYDE & CO., General Agents, 5 Bowling Green, N. Y., 12 S. Delaware Ave., Philadelphia, Pa.

In writing to advertisers mention this Journal.

Notes and Comments (continued).

pages, many beautiful illustrations, and is a complete hand-book of this popular route. Its perusal aroused in the mind of the writer most pleasant recollections of delightful days spent upon the steamers of this well-known company, and brings a most irresistible longing to close the desk, throw aside business, and seek the sunny shores of beautiful Florida.

Pathology and Treatment.—A modern pathological and therapeutical study of rheumatism, gout, rheumatoid arthritis, and allied affections. By Edmund L. Gros, M.D., of the Faculty of Paris (Translated from the French). This is the title of a little book which gives an interesting sketch of the pathogenesis of the diseases named and a review of different methods of treatment. The author advocates the use of the natural methyl-salicylic acid derived from oil of gaultheria in combination with the alkaloid colchicine. This combination is known commercially as colchi-sal, the agents for which in this country are E. Fougera & Co., 26, 28, and 30 North William St., New York.

Franklin Mills' Flour.—This flour is made by the Franklin Mills Company, of Lockport, N. Y., from the entire wheat. Compared with the best grades of white flour, it contains less water, but more gluten, fats, and phosphates. The Franklin Mills' flour can, therefore, be recommended as a valuable food, well adapted to build up the bones and teeth, and to nourish the muscular and nervous systems. Bread made from the Franklin Mills' flour is superior in nutritious qualities to that made from white flour.

35 THIRTY-FIVE YEARS A STANDARD. 35

Elixir Iodo Bromide of Calcium Compound (Tilden's).

An Unequaled Alterative Tonic, Resolvent and Aperient.

Physicians can always rely upon getting satisfactory results from this preparation in the treatment of Syphilis, Syphilitic Sores, Tuberculosis, Scrofulous Tumors and Abscesses, Necrosis or other Diseased Conditions of the Bones (such as Defective Ossification, Rickets, etc.), Old Sores, Eczema, White Swelling, etc.

Unlike other preparations of this class, Elixir Iodo Bromide of Calcium Compound (Tilden's) does not irritate the stomach, but, on the contrary, strengthens and improves digestion.

FIRWEIN (Tilden's)

Will be found to be of the highest therapeutic value in the treatment of Chronic Bronchitis, Bronchial Catarrh, Phthisis Pulmonalis, etc. If you have not used the preparation, try it and be convinced of its great value. Send to the manufacturers for literature and samples. The above preparations are manufactured only by

THE TILDEN COMPANY,

New Lebanon, N. Y. **St. Louis, Mo.**

In writing to advertisers mention this Journal

Notes and Comments (continued).

Cactina Pillets.—I take pleasure in offering my testimony to the great value of cactina pillets, in cases of weak and irregular action of the heart. I have used them for four years and have never been disappointed in them. They not only stimulate the heart, but improve that organ permanently. I find them very useful in all cases of typhoid fever and pneumonia.—C. B. Matthews, M.D., Kent, Ind.

The Uses of Supplied Blood, or Hæmotherapy.—Topically applied, bovine blood, or bovinine, enters directly into the repair and vitalization of tissues with the same effect in kind as that of the best native blood circulating in a healthy individual; and not only so, but with effect increased in rapidity and amount by so much as the quantity topically applicable to a given point of disease, such as an ulcer, exceeds the small modicum of native blood, distributed at any time to such a point.

A combination of bovinine and peroxide of hydrogen as an external dressing to wounds operates at once antiseptically and analgesically, destroying pain, pus, and stench in the worst cases, while effecting a rapid and certain repair and healing of tissues. Perhaps no more powerful cleanser of diseased tissue and neutralizer of septic matter has been discovered than this combination of bovine blood and peroxide of hydrogen, singularly free, as it is, at the same time, from all irritating and drugging or toxic effects.

The Sound View Hospital, established at Stamford, Conn., by Dr. T. J. Biggs for the systematic application of supplied blood, has records of numerous cases of

White Rock Ozonate Lithia Water

PLEASES PARCHED PALATES PERFECTLY.

Assists elimination, stops fermentation. People drink it because they like it; hence the uniform success reported by thousands of physicians who prescribe it.

Bottled Only by

WHITE ROCK MINERAL SPRINGS CO., Waukesha, Wis.

Notes and Comments (continued).

ulcers treated according to this method. Among the recorded cases are specially described one of bullet wound with traumatic bone necrosis, ulcer of the stomach, necrosis of bone, anæmia, ulceration of womb and cervex, etc. In surgical cases the usual operative means were employed, the patients placed upon bovinine internally, and the wounds cleansed or dressed with bovinine or the bovinine-peroxide combination.

Ferratin.—This organic iron compound, identical with the ferruginous extract from all food, animal and vegetable, and stored in the liver and other organs, "as reserve iron for blood-formation" (Schmiedeberg), is to become official in the new edition of the Russian Pharmacopœia on the recommendation of the committee now working on the revision. Ferratin is recommended as a prompt tonic for convalescent, especially those recovering from the shock of operations.—Journal Cutaneous and Genito-Urinary Diseases, July, 1897.

Bromidia.—I have given your bromidia with success as a remedy for insomnia, especially where produced by excessive study or mental work.—Dr. Luigi Salucci, Physician to the Holy Apostolic Palaces, The Vatican, Rome.

September 1, 1897.

Obstinate Constipation.—I used chionia, a teaspoonful three times a day and at bed-times, in a case of long-standing, obstinate constipation. The first three nights I directed a hot-water enema to be given every night. This treatment brought about regular and spontaneous evacuations and resulted in a complete cure.—E. T. Bainbridge, M.D. Lickton, Tenn.

The Half-Century Mark Reached.—The Tilden Company, of New Lebanon, N. Y., was established in 1848. They entered the new year upon their fiftieth anniversary as manufacturing pharmacists. The first to place upon the market fluid extracts, sugar coated pills, Florida waters, etc. No better goods are offered, and none enjoy a more enviable reputation with the profession. They have within the last five years established a branch house in St. Louis for supplying the Western and Southern trade.

Campho-phenique.—Dr. W. H. Grayson, Surgeon to St. Mark's Railroad Hospital, Venice, Ill., says: "I have used campho-phenique in all sorts of surgical procedures, and believe it to be the best antiseptic known. I find it non-irritating, non-poisonous, and highly germicidal. It corrects offensive odors and facilitates healing. In a word, campho-phenique is the only antiseptic agent I am acquainted with that possesses all the good qualitites without any of the bad. It is the remedy, per excellence, in erysipelatous affections."

A Big Success.—The placing of the new five-pound tin, or hospital, size of unguentine on the market, by the Norwich Pharmacal Co., was a "happy hit." The fact that there was over two thousand pounds of this size ordered before the package was ready for delivery shows that the physicians who have been using this preparation welcome the new package, for the reason that it is cheaper and more convenient to handle, and in buying it in this quantity there is the advantage both to the physician and the pharmacist, and we predict that this package will in a few months exceed the sales of their one-pound jar.

THE LAST DROP

of Goldbeck's Malt Extract is just as clear and good as the first, but as long as your patients have a trace of Dyspepsia or Anæmia they should be advised to have a supply of

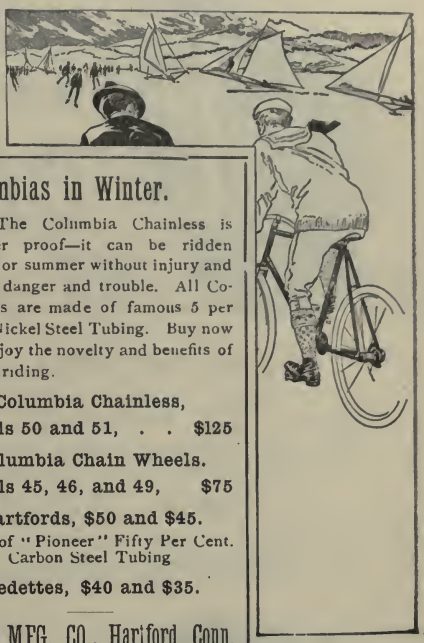
Goldbeck's Malt Extract

in the house so that the last drop will not be reached too soon. Many eminent physicians pronounce it the most reliable Malt Extract made, because of its small percentage of alcohol and large amount of Diastase.

Send us the name of a patient who should use it—we will send six full-sized bottles free, patient to pay expressage. "Facts and Fancies," an interesting booklet, mailed free, by

JOHN F. BETZ & SON, Limited,

415-427 Callowhill Street, Philadelphia, Pa.



Columbias in Winter.

The Columbia Chainless is weather proof—it can be ridden winter or summer without injury and avoids danger and trouble. All Columbias are made of famous 5 per cent. Nickel Steel Tubing. Buy now and enjoy the novelty and benefits of winter riding.

Columbia Chainless,
Models 50 and 51, . . $125

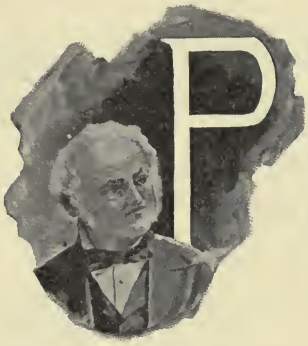
Columbia Chain Wheels.
Models 45, 46, and 49, $75

Hartfords, $50 and $45.
Made of "Pioneer" Fifty Per Cent. Carbon Steel Tubing

Vedettes, $40 and $35.

POPE MFG. CO., Hartford Conn.

Catalogue for one 2-cent stamp.



PHYSICIANS' CARRIAGES

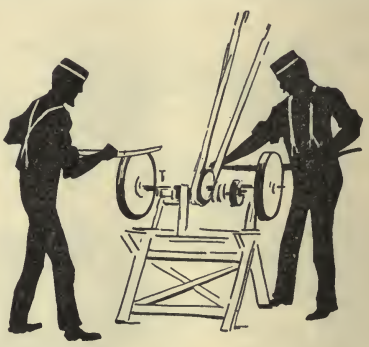
HAND MADE.

SEND

For Our Beautiful Catalogue Illustrating Many Styles.

OUR PRICES ARE LOWER THAN ANY OTHER FACTORY CAN QUOTE, QUALITY CONSIDERED.

We have a Four Months' Price and a Spot Cash Price, and Sell direct to the consumer in places where dealers do not keep our goods.



All Vehicles Guaranteed for Two Years.

THE COLUMBUS PHAETON CO.

174 to 190 Broad Street, **COLUMBUS, OHIO.**

In writing to advertisers mention this Journal

IN PRESS. FOR EARLY PUBLICATION.

A New Work on Conservative Gynecology and Electro-Therapeutics.

A PRACTICAL TREATISE

ON THE

Diseases of Women,

WITH SPECIAL REFERENCE TO THEIR TREATMENT BY ELECTRICITY.

Third Edition. Revised, Rewritten, and Greatly Enlarged.

By G. BETTON MASSEY, M.D.,

Physician to the Gynecologic Department of Howard Hospital and late Electro-Therapeutist to the Infirmary for Nervous Diseases; Fellow and Ex-President of the American Electro-Therapeutic Association; Member of the Société Française d'Electrotherapie, American Medical Association, etc., etc.

Appropriately Illustrated with many Original full-page handsome Chromo-Lithographic Plates of Drawings and Paintings made from nature specially for this work by a competent artist and with beautifully printed full page Half-tone Plates of Photographs taken from nature, as well as numerous Photo- and Wood-engravings in the text.

COMPLETE IN ONE ROYAL OCTAVO VOLUME. BOUND IN EXTRA CLOTH.

This work is not only a revision and expansion of the author's two preceding editions of "Electricity in the Diseases of Women," with a full consideration of the latest advances in the application of electricity in gynecology, but it has been recast in the form of a complete treatise on Conservative Gynecology from the Stand-point of the General Practitioner. Recognizing the fact that most modern treatises on gynecology are written from the point of view of the operative surgeon, the author has endeavored to produce a work which will assist the physician in the management of these cases without recourse to the knife, whenever this is practicable, and deals fully with the indications for the employment of electricity after the methods of Apostoli and others.

The work is, therefore, an appeal for a more conservative treatment of the diseases of women, and presents ample data in justification of the author's well-known position on this point, followed by detailed directions for the application of the methods described, together with a complete introduction to medical electricity. In a chapter on malignant affections a full description is given of the method discovered by the author whereby mercury and other chemically nascent lethal substances are disseminated throughout a cancer by cataphoresis for the interstitial destruction of malignant cells.

THE F. A. DAVIS COMPANY, Medical Publishers.

PHILADELPHIA: 1914-16 Cherry Street.
NEW YORK: 117 W. Forty-second Street.
CHICAGO: 9 Lakeside Building, 214-220 S. Clark Street.

In writing to advertisers mention this Journal

PEPPER WHISKY

ESTABLISHED 1780

THE GENUINE HAS THIS COUPON
PULL OFF ONLY When Bottle is EMPTIED PATENTED
EXTRA CAUTION
Anyone refilling this bottle without destroying the labels is criminally liable and on detection will be prosecuted to the full extent of the law
DISTILLERY BOTTLING
OLD PEPPER WHISKY
ESTABLISHED 1780
THE OLDEST & BEST BRAND OF WHISKY MADE IN KENTUCKY
Every Genuine BARREL HAS OUR TRADE MARK AND FIRMAN'S SIGNATURE BURNED ON THE HEAD
PEPPER DISTILLERY HAND-MADE SOUR MASH ESTABLISHED 1780 JAS. E. PEPPER & CO. DISTILLERS. LEXINGTON, KY.
TRADE MARK
Consumers Should Satisfy Themselves that this WHISKY IS BOTTLED BY
Jas. E. Pepper & Co.
LEXINGTON, KY.
READ COUPON ON BACK OF THIS LABEL
COPYRIGHT 1897 BY STROBRIDGE LITH. CO. CINCINNATI & NEW YORK.

BUY GENUINE DISTILLERY BOTTLING ONLY

FROM HONEST DEALERS OR THE DISTILLERY DIRECT

AND THUS AVOID IMITATIONS AND REFILLED BOTTLES

Genuine distillery bottling of Old Pepper Whisky, distilled only by Jas. E. Pepper & Co., Lexington, Ky., under the same formula for more than 100 years, is guaranteed absolutely the purest and best in the world. Sample case, $15.00, sent on trial, which, if not perfectly satisfactory, can be returned and money will be refunded.

Read and save coupons on genuine Distillery Bottling of Old Pepper Whisky and see who gets the $5500 in 1898, in addition to $1.00 per dozen.

Been giving satisfaction for 118 years---need we say more ?

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

The Regular Session begins October 4, 1897, and continues until May. It is preceded by a Preliminary Session of two weeks, and followed by a Post-Graduate Course until middle of June.

Preliminary examination, or equivalent degree, and four years' graded course obligatory.

Instruction is given by lectures, recitations, clinical teaching, and practical demonstrations. In the subjects of Anatomy, Pharmacy Chemistry, Physiology, Hygiene, Therapeutics, Histology, and Pathology and Bacteriology special practical laboratory instruction is given, Also bedside instruction in Medicine, Surgery, and Gynæcology.

Examinations are held at the close of each Regular Session upon the studies of that term.

FACULTY:

Therapeutics, Skin and Venereal Diseases,.....J. V. Shoemaker, M.D., LL.D.
Practice.....J. M. Anders, M.D., Ph.D.
Surgery and Pathology Ernest Laplace, M.D., LL.D.
Wm. L. Rodman, M.D.
Obstetrics.....W. Frank Haehnlen, M.D., Ph.D.
Gynæcology.....W. Easterly Ashton, M.D.

Ophthalmology.....L. Webster Fox, A.M., M.D.
Physiology.....Isaac Ott, A.M., M.D.
Hygiene.....Seneca Egbert, A.M., M.D.
Clinical Medicine.....William E. Hughes, M.D.
Nervous Diseases.....Chas. W. Burr, A.M., M.D.
Children's Diseases.....W. C. Hollopeter, M.D.

For further information or announcement, address

SENECA EGBERT, A.M., M.D., DEAN,
Medico-Chirurgical College, Philadelphia, Pa.

WAMPOLE'S LIQUID WHEAT.

Each teaspoonful represents **one ounce** of **all** parts of the **whole wheat grain**, partly predigested and concentrated *in vacuo;* has sufficient **diastase** to digest five times its weight of dry starch, and contains one-eighth grain U. S. P. Pepsin.

Liquid Wheat contains over **seven per cent.** of the **Nutrient Organic Hypophosphites**, obtained solely from wheat, principally from the germ and cortical portions. Contains all the elements of nutrition, and is an efficient aid to the digestion of both **starchy** and **nitrogenous** foods. Valuable as a supplementary diet for growing children, insuring sufficient **tooth nutrition**, allaying **nervous irritability**, and inducing **plumpness**.

SAMPLES AND LITERATURE CHEERFULLY FURNISHED UPON APPLICATION.

Prepared by

HENRY K. WAMPOLE & CO.,
Manufacturing Pharmacists, Philadelphia, Pa.

"Do Not Stammer."

The method employed for the permanent cure of Stammering and Stuttering is the fruit of a long personal effort of Mr. Johnston to overcome a severe impediment from which he has suffered forty years. The system is indorsed by

Hon. John Wanamaker, Ex-Postmaster-General U. S.; Prof. Horatio C. Wood, M.D., LL.D., and Dr. Harrison Allen of the University of Pennsylvania.

Send for 60-page book to

PHILADELPHIA INSTITUTE,

ESTABLISHED 1884. *1033 Spring Garden St., Philadelphia, Pa.*

EDWIN S. JOHNSTON,
Principal and Founder

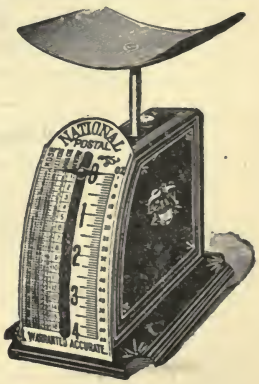
TWO POPULAR POSTAL SCALES.

MAIL AND EXPRESS weighs up to 16 pounds by ½ ounces for express packages and gives exact cost of postage in *cents* on all *mail matter*, $5.00.

NATIONAL weighs up to 4 pounds by ½ ounces, and gives also exact cost of postage, $3.00.

BOTH WARRANTED ACCURATE.

PELOUZE SCALE & MFG. CO., Chicago.



In writing to advertisers mention this Journal

FOR THE WINTER GO TO BERMUDA.

Frost Unknown. Malaria Impossible.

FROM NEW YORK, 48 HOURS, BY ELEGANT STEAMSHIPS WEEKLY.

FOR WINTER CRUISES GO TO

WINDWARD WEST INDIES.

PRETORIA,
3,300 tons.
February 1.

MADIANA,
3,080 tons.
February 16.

FOR PAMPHLETS AND FULL INFORMATION SEND TO

A. E. OUTERBRIDGE & CO., Agents, 39 Broadway, New York.

QUEBEC STEAMSHIP CO., Ltd.

Or to THOMAS COOK & SON, Agts., 261 Broadway, N. Y. A. AHERN, Sec., Quebec, Canada.

NOW READY.

A Very Important Contribution to Laryngological Science.

Autoscopy of the Larynx and the Trachea.

(DIRECT EXAMINATION WITHOUT MIRROR.)

By ALFRED KIRSTEIN, M.D., Berlin.

Authorized Translation (Altered, Enlarged, and Revised by the Author) by

MAX THORNER, A.M., M.D., Cincinnati, O.

Professor of Clinical Laryngology and Otology, Cincinnati College of Medicine and Surgery; Laryngologist and Aurist Cincinnati Hospital, etc.

About 75 Pages, with Twelve Illustrations. Crown Octavo, bound in Extra Cloth, price, 75 cents net.

THE F. A. DAVIS COMPANY, Publishers.

PHILADELPHIA: 1914 and 1916 Cherry St.
NEW YORK: 117 W. Forty-Second St.
CHICAGO: 9 Lakeside Building, 214-220 S. Clark St.

A $7.00 BOOK of EUGENE FIELD'S POEMS

Handsomely Illustrated by 32 of the World's Greatest Artists.

GIVEN FREE

to each person interested in subscribing to the Eugene Field Monument Souvenir Fund. Subscriptions as low as $1.00 will entitle the donor to this handsome volume (cloth bound, size 8x11) as a souvenir certificate of subscription to the fund toward building a monument to the Beloved Poet of Childhood

But for the noble contribution of the world's greatest artists this book could not have been manufactured for less than $7.

Address EUGENE FIELD MONUMENT SOUVENIR FUND, 412 Fort Dearborn Building, Chicago, Ill.

Mention this journal, as advertisement is inserted as our contribution.

GLASS & METAL SIGNS

HIGHEST GRADE FOR PHYSICIANS, DENTISTS ETC.

J.W. RUSSELL & CO.

MFRS 294 PEARL ST. NEW YORK.

WRITE FOR PRICE LIST.

Alice B. Stockham, M.D.

Author of "Tokology," "Karezza," etc., etc., writing on "constipation" says, "Wheatlet and Flour of the Entire Wheat are very useful in establishing a correct habit. In these the gluten which lies next the bran is preserved—this contains the nitrates that feed muscular tissues and the mineral product that nourishes and sustains the nervous system. For constipation these foods are the natural remedy and preventive, as they give the ganglionic nerve centers nutriment, and hence enable them to preside over the functions of digestion. Entire Wheat Flour, Franklin Mills Co., Lockport, N. Y., fulfills these conditions, and is one of the noblest additions to the foods of the World. The grain is denuded of the outside silicious bark and then ground into a fine flour, and all the elements of the grain are preserved."

If your grocer does not keep it, send us his name and your order—we will see that you are supplied.

See that the Flour delivered bears our label; avoid substitutes.

Send for Booklet.

The genuine made only by the.....

FRANKLIN MILLS CO., LOCKPORT, N

A MOST INTERESTING NEW BOOK.

AN EPITOME OF THE

HISTORY OF MEDICINE

From the Earliest Times to the Present.

By ROSWELL PARK, A.M., M.D.,

Professor of Surgery and Clinical Surgery in the Medical Department of the University of Buffalo, Buffalo, New York, etc , etc.

Handsomely Illustrated with Half-tone Reproductions of Portraits of the Eminent Physicians and Surgeons of all time and other Engravings.

Royal Octavo. 350 Pages. Extra Cloth. $2.00 net. Now Ready.

THE F. A. DAVIS CO., Publishers, 1914-16 Cherry St., Philadelphia.

24 HOURS TO FLORIDA

THE PLANT SYSTEM

Shortest & Quickest Line
THE
"NEW YORK & FLORIDA SPECIAL"

"ALL THE COMFORTS OF HOME"

RUNNING VIA
PENNSYLVANIA R.R.
ATLANTIC COAST LINE
AND
Plant System

PULLMAN VESTIBULE TRAIN.
ELECTRIC LIGHTED, STEAM HEATED,
SUPERB DINING CAR SERVICE,
EVERY MODERN SAFETY APPLIANCE.

PRINCIPAL OFFICES IN THE EAST

NEW YORK	BOSTON	PHILADELPHIA
261 BROADWAY	290 WASHINGTON ST.	100 SOUTH 4TH ST.

2 OTHER FAST TRAINS DAILY

JUST PUBLISHED.

EYE-STRAIN IN HEALTH AND DISEASE,

WITH SPECIAL REFERENCE TO THE

AMELIORATION OR CURE OF CHRONIC NERVOUS DERANGEMENTS WITHOUT THE AID OF DRUGS.

A Manual for the General Practitioner in Medicine to Aid in Detecting the Presence and Appreciating the Importance of Eye-strain in Health and Disease.

BY AMBROSE L. RANNEY, A.M., M.D.,

AUTHOR OF "LECTURES ON NERVOUS DISEASES," "THE APPLIED ANATOMY OF THE NERVOUS SYSTEM," "A TREATISE ON SURGICAL DIAGNOSIS," "PRACTICAL MEDICAL ANATOMY," ETC. LATE PROFESSOR OF ANATOMY OF THE NERVOUS SYSTEM IN THE NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL; LATE PROFESSOR OF NERVOUS DISEASES IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF VERMONT, ETC., ETC.

THIS treatise is one of so much importance to the general practitioner that its great practical value can hardly be overestimated. For many years Dr. Ranney has devoted the most painstaking and unprejudiced study and investigation to an almost endless variety of cases. The results are crystallized and given unreservedly to the medical profession in this handy volume.

The various chapters of the work are replete with illustrative cases. They discuss the results of Eye-treatment of Headache, Neuralgias, Sleeplessness, St. Vitus's Dance, Chronic Digestive Diseases, Epilepsy, Nervous Prostration, and Insanity.

The steps and instruments employed in testing by the latest methods the eyes and eye-muscles are described with sufficient detail to meet the requirements of the general practitioner in medicine, as well as the oculist, in making a diagnosis.

The indications and contra-indications for operative procedures upon the eye-muscles, and the method of performing graduated tenotomies and advancement operations are furthermore discussed in a separate chapter.

Fully Illustrated. In One Royal Octavo Volume. 325 Pages. Handsomely Bound in Extra Cloth, $2.00 net.

THE F. A. DAVIS CO., PUBLISHERS,
1914 AND 1916 CHERRY STREET, PHILADELPHIA, PA.

THE FIRST VOLUME OF....

Sajous's Annual and Cyclopædia of Practical Medicine

will be issued very shortly. It will be absolutely the most complete and satisfactory method of keeping abreast of the times obtainable at any price and in any form.

It is unique, combining, as it does, the salient features of a Text-book, an Annual, and a System of Medicine, covering journal references and monographs issued as late as December, 1897.

Before you subscribe to any

System, Hand-book, Practice, Year-book, or Annual,

see what we have prepared for you.

It is meeting with great success wherever introduced, and has, up to this date, reached the largest advance sale ever given to any medical publication.

Our salesman will soon call on you.

THE F. A. DAVIS COMPANY,

1914 and 1916 Cherry Street, Philadelphia.

SOUND ADVICE.

"I have not become acquainted with Dr. Cathell through the medical press; I do not know whether he has discovered a new bacterium, or a novel method of emptying the female pelvis, or an antitubercular serum; but I do believe in this book he will live in the grateful hearts of generation after generation of physicians who will owe much of their success to him. He has seen much, and his experience is here crystallized into sound advice. There is help in it for the physician who finds, after a short time, that 'something is wrong' with his career. Here he can find what is the matter and the remedy for it. The senior student should read it before he even thinks of a location; he should read it often during his early professional life, **for from it he will gain much that he would otherwise obtain only from sometimes bitter experience.**"

G. H. S. in "The Colorado Medical Journal," Denver, Colorado.

THE FOREGOING REMARKS REFER TO THE

BOOK ON THE PHYSICIAN HIMSELF,

And Things that Concern his Reputation and Success.

—BY—

D. W. CATHELL, M.D.

Tenth Edition. Author's last revision. Royal Octavo. About 350 pages. Extra Cloth. Net, $2.00.

THE F. A. DAVIS CO., Publishers.

PHILADELPHIA: 1914 and 1916 Cherry Street.
NEW YORK: 117 W. Forty-Second Street.
CHICAGO: 9 Lakeside Building, 214-220 S. Clark Street.

DOCTOR, Do you Keep your Accounts in the

Physicians' All-Requisite

Time- and Labor- Saving Account-Book?

If so, you know what it is to have your patients' accounts always in the most satisfactory shape attainable. If not, this is a good time to begin, and, the sooner you commence, the more you will congratulate yourself and us upon your sensible choice.

In every essential, such as **the Saving of Time, Labor, Anxiety, and Expense,** and in **Accuracy, Clearness, and Completeness of Record,** it is, by all odds, the most desirable book of its class. It is made in two sizes, as follows:—

No. 1. For 900 Accounts per Year, 300 Pages, Size, 10 x 12. Bound in ¾-Russia, Raised Back-Bands, Cloth Sides, ... **$5.00**

No. 2. For 1800 Accounts per Year, 600 Pages, Size, 10 x 12. Bound in ¾-Russia, Raised Back-Bands, Cloth Sides, ... **$8.00**

These are net prices, shipping expenses prepaid, but do not include the Custom duties to purchasers in Canada.

Send us your address and we will immediately forward you a complete descriptive circular showing in detail the plan of the book and how the accounts are kept.

MENTION SHOULD ALSO BE MADE OF

THE MEDICAL BULLETIN VISITING-LIST,

OR PHYSICIANS' CALL-RECORD.

Arranged upon an Original and Convenient Monthly and Weekly Plan for the Daily Recording of Professional Visits. Frequent Rewriting of Names Unnecessary.

Physicians of many years' standing and with large practices pronounce it **the Best List they have ever seen.** It is handsomely bound in fine, strong leather, with flap, including a pocket for loose memoranda, etc., and is furnished with a Dixon lead-pencil of excellent quality and finish. It is compact and convenient for carrying in the packet. Size, 4 x 6⅞ inches.

IN THREE STYLES.

No. 1. Regular size to accommodate 70 patients daily each month for one year, ... Net, **$1.25**

No. 2. Large size to accommodate 105 patients daily each month for one year, ... Net, **$1.50**

No. 3. In which the "Blanks for Recording Visits in" are in removable sections, ... Net, **$1.75**

N. B.—The Recording of Visits in this List may be Commenced at any Time during the Year without Loss or Waste of Space. Send for a detailed descriptive circular.

THE F. A. DAVIS COMPANY, Medical Publishers.

PHILADELPHIA: 1914 and 1916 Cherry Street.
NEW YORK: 117 West Forty-Second Street.
CHICAGO: 9 Lakeside Building, 214-220 South Clark Street.

In writing to advertisers mention this Journal

THE DIETZ
DRIVING LAMP

Is about as near perfection as 50 years of Lamp-Making can attain to. It burns kerosene, and gives a powerful, clear, white light, and will neither blow nor jar out. When out driving with it the darkness easily keeps about two hundred feet ahead of your smartest horse. When you want the very best Driving Lamp to be had, ask your dealer for the "Dietz."

We issue a special Catalogue of this Lamp, and, if you ever prowl around after night-fall, it will interest you. 'Tis mailed free.

R. E. DIETZ CO.,
60 Laight St., New York.

Established in 1840.

AFRÓDYN

(P. C. CO.) Five-grain Tablets.

(APHRODISIAC.)

Indications and Uses:

In functional and many organic derangements of the Genito-urinary Organs of males and females, such as Impotence, Chronic Urethral Discharges, Prostatitis, Seminal Emissions, Loss of Sexual Appetite, and all other diseases affecting the powers of procreation.

FORMULA.—The active principles of: Muirapuama, 280 parts; Nux Vomica, 20 parts; Sanguinaria, 269 parts; Phosphorus, 1 part; Damiana, 110 parts; Cimicifuga, 320 parts; and adjuvants, combined in small, palatable, five-grain tablets.

Price, $2.00 per 100 Tablets.

PREPARED BY THE
PHÉNIQUE CHEMICAL CO.,
2221 Olive St., St. Louis, Mo.

....THE THIRD EDITION....

Of an Important Book within Twenty (20) Months of its First Issue.

Practical Uranalysis and Urinary Diagnosis,

A Manual for the Use of Physicians, Surgeons, and Students.

By CHARLES W. PURDY, M.D.,

AUTHOR OF "DIABETES: ITS CAUSES, SYMPTOMS, AND TREATMENT." AND OF "BRIGHT'S DISEASE AND ALLIED AFFECTIONS OF THE KIDNEYS"; PROFESSOR OF UROLOGY AND URINARY DIAGNOSIS IN THE CHICAGO POST-GRADUATE MEDICAL SCHOOL.

Third Edition. Revised. With Numerous Photo-Engravings and Seven (7) Full-Page Colored Plates, Crown Octavo, Nearly 400 Pages. Cloth, $2.50 net.

For sale by Booksellers generally or will be forwarded, carriage free, on receipt of price by the Publishers.

THE F. A. DAVIS COMPANY, Publishers,

PHILADELPHIA: 1914 and 1916 Cherry St.
NEW YORK: 117 W. Forty-Second St.
CHICAGO: 9 Lakeside Building, 214-220 S. Clark St.

SYR. HYPOPHOS. CO., FELLOWS.

NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, ***finds that no two of them are identical,*** and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, ***in the property of retaining the strychnine in solution,*** and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. ***Fellows.***"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to

Mr. FELLOWS, 48 Vesey Street, New York.

Virginia Hot Springs

Open All the Year. 2,500 FEET ELEVATION. ON CHESAPEAKE & OHIO RAILWAY.

THE NEW HOMESTEAD,

a grand new hotel completed last year, equipped and furnished throughout in accordance with the latest designs and most modern improvements. The Virginia, the Annex, and ten new cottages clustered near the Homestead. A handsome new Casino adds greatly to indoor enjoyment.

Golf Links and Club House, Tennis Courts, Billiards, Pool, Riding School and Fine Livery.

MAGNIFICENT MOUNTAIN SURROUNDINGS. FINEST BATH-HOUSE IN AMERICA.
MOST CURATIVE BATHS KNOWN

for rheumatism, gout, and nervous troubles. All baths from flowing streams of natural hot water.

Located nearly midway between Washington, Old Point Comfort, and Cincinnati or Louisville. Hot Springs is an exceptionally convenient and delightful stopping-place for west-bound travelers.

Special Pullman Compartment Car leaves Pennsylvania Station, New York, 4 50 P.M., Tuesday, Thursday, and Saturday, and arrives at Hot Springs via Washington, 7 25 A M Dining car.

Excursion tickets, baggage checks, and Pullman Reservations at Chesapeake & Ohio Railway Offices, 362 and 1323, Broadway, New York, also offices Pennsylvania Railroad and connecting lines.

For illustrated pamphlets and further particulars, address W. H. GREEGOR, General Agent Passenger Department Chesapeake and Ohio Railway, Washington, D. C., or

FRED STERRY, Manager, Hot Springs, Bath Co., Va.

In writing to advertisers mention this Journal

ANALGESIC. **ANTIPYRETIC.**

KRYOFINE

IN INFLUENZA.

In an article with this title Dr. Bresler, Chief Physician to Prov. Heil und Pflege Anstalt, Freiburg, remarks :—

"The influence of Kryofine is one opposed to the production of fever; it not only acts to reduce a certain temperature. but also decidedly prevents a further rise in temperature when given at the time of day this usually occurs. The subjective symptoms were ameliorated by Kryofine."

Prof. Eichhorst, Director of Medical Clinic, University of Zurich, says :—

"In a man with alcoholic polyneuritis, for whose intense pain sodium salicylate, phenacetin, antipyrine, and exalgin had been prescribed without any effect, by means of Kryofine alone a very prolonged relief from pain was effected. The drug was prescribed 7½ grains three times a day."

Dr. Banga, Professor of Gynæcology, Chicago Policlinic, states :—

"For the last three or four months I have given Kryofine in all cases of neuralgia where formerly I used to prescribe phenacetin, antikamnia, etc. The results obtained with the Kryofine were excellent, and in no case did I notice any disagreeable symptoms, so that I consider it the best analgesic so far known to me."

Samples and Clinical Reports on Request.

C. BISCHOFF & CO., New York.

Hold Fast

To That Which Is Good!

WHEN a Physician learns by experience that a certain remedy produces positive results, he becomes familiar with its indications, limitations and therapy, and therefore wants no substitute or make-shift dispensed when he prescribes it.

When a Physician has for a long time prescribed

Pepto-Mangan ("Gude")

AS A BLOOD BUILDER IN

Anæmia, Chlorosis, Rickets, Amenorrhœa, Dysmenorrhœa, Chorea, Bright's Disease, &c.,

he knows by experience that it is a standard of therapeutic worth and wants no other.

BUT SOMETIMES THE PATIENT DON'T GET IT, DOCTOR!

To assure the proper filling of your prescriptions, order Pepto-Mangan "Gude" in original bottles.

IT'S NEVER SOLD IN BULK.

M. J. BREITENBACH COMPANY,

Sole Agents for United States and Canada,

56-58 WARREN ST., NEW YORK.

LABORATORY:
LEIPZIC, GERMANY

HYDROZONE

(30 volumes preserved aqueous solution of H_2O_2)

IS THE MOST POWERFUL ANTISEPTIC AND PUS DESTROYER.
HARMLESS STIMULANT TO HEALTHY GRANULATIONS.

GLYCOZONE

(C. P. Glycerine combined with Ozone)

THE MOST POWERFUL HEALING AGENT KNOWN.

These remedies cure all diseases caused by Germs.
Successfully used in the treatment of diseases of the Genito-Urinary Organs (Acute or Chronic):

WHITES, LEUCORRHŒA, VAGINITIS, METRITIS, ENDOMETRITIS, ULCERATION of the UTERUS, - URETHRITIS, GONORRHŒA, - CYSTITIS, ULCER of the BLADDER, Etc.

Send for free 240-page book "Treatment of Diseases caused by Germs," containing reprints of 120 scientific articles by leading contributors to medical literature.

Physicians remitting 50 cents will receive one complimentary sample of each, "Hydrozone" and "Glycozone" by express, charges prepaid.

Hydrozone is put up only in extra small, small, medium, and large size bottles, bearing a red label, white letters, gold and blue border with my signature.

Glycozone is put up only in 4-oz., 8-oz. and 16-oz. bottles, bearing a yellow label, white and black letters, red and blue border with my signature.

Marchand's Eye Balsam cures all inflammatory and contagious diseases of the eyes.

PREPARED ONLY BY

Charles Marchand

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).

Charles Marchand, 28 Prince St., New York.

Sold by leading Druggists. Avoid Imitations. ☞Mention this Publication.

In Anemia, Chlorosis, Debility, Convalescence, and Impoverished Blood conditions generally, Ferratin will nourish the blood, restore appetite, improve the digestion. It is readily assimilated, does not constipate, does not affect the teeth, has no injurious side-effects. Dose for adults: 8 grains three times daily; children in proportion.

Feed the blood with Ferratin

Always prescribe a One-ounce Package of Ferratin (Powder or Tablets): this quantity is necessary to obtain full and satisfactory results, and the cost is least to patient.

Supplied in one-ounce packages only. Powder, in vials, with dose-caps. Tablets (8 grains each), in tin boxes.

Prof. Graham Lusk, of Yale University, in his chapter on the Chemistry of the Blood in the new "American Text-Book of Physiology" (W. B. Saunders, 1896) quotes proof of the presence of, and necessity for, Ferratin in the blood.

Prof. R. H. Chittenden, of Yale University, editorially in the *Dietetic and Hygienic Gazette*, October, 1895, endorsed the "Ferratin of Schmiedeberg" as "particularly adapted to supply the needs of the body for an easily assimilable form of iron."

Prof. G. A. Fackler, of Cincinnati, reported his experience with Ferratin in the *Lancet-Clinic* (April 7, 1894), saying: "The physiological and therapeutic importance of Ferratin is based upon the fact that, after absorption, it is immediately available, while other compounds of iron, including the simple albuminates, must first be changed into Ferratin (in the system) in order to become active agents.

Clinical Reports Mailed on Request by C. F. Boehringer & Soehne, 7 Cedar St., N. Y.